

CLASSIC REPRINT SERIES

THE MERCHANTS' MAGAZINE AND COMMERCIAL REVIEW


From July to December,
Inclusive, 1867

Vol. 57




by
William B. Dana

Forgotten Books



Digitized by the Internet Archive
in 2022 with funding from
Kahle/Austin Foundation



1,000,000 Books

are available to read at


Forgotten Books



www.ForgottenBooks.com



Read online
Download PDF
Purchase in print



ISBN 978-1-5285-3029-3

PIBN 10932332

This book is a reproduction of an important historical work. Forgotten Books uses state-of-the-art technology to digitally reconstruct the work, preserving the original format whilst repairing imperfections present in the aged copy. In rare cases, an imperfection in the original, such as a blemish or missing page, may be replicated in our edition. We do, however, repair the vast majority of imperfections successfully; any imperfections that remain are intentionally left to preserve the state of such historical works.

Forgotten Books is a registered trademark of FB & c Ltd.

Copyright © 2018 FB & c Ltd.

FB & c Ltd, Dalton House, 60 Windsor Avenue, London, SW19 2RR.

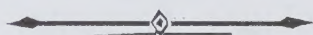
Company number 08720141. Registered in England and Wales.

For support please visit www.forgottenbooks.com

1 MONTH OF FREE READING

at

www.ForgottenBooks.com



By purchasing this book you are eligible for one month membership to ForgottenBooks.com, giving you unlimited access to our entire collection of over 1,000,000 titles via our web site and mobile apps.

To claim your free month visit:

www.forgottenbooks.com/free932332

* Offer is valid for 45 days from date of purchase. Terms and conditions apply.

English
Français
Deutsche
Italiano
Español
Português

www.forgottenbooks.com

Mythology Photography **Fiction**
Fishing Christianity **Art** Cooking
Essays Buddhism Freemasonry
Medicine **Biology** Music **Ancient**
Egypt Evolution Carpentry Physics
Dance Geology **Mathematics** Fitness
Shakespeare **Folklore** Yoga Marketing
Confidence Immortality Biographies
Poetry **Psychology** Witchcraft
Electronics Chemistry History **Law**
Accounting **Philosophy** Anthropology
Alchemy Drama Quantum Mechanics
Atheism Sexual Health **Ancient History**
Entrepreneurship Languages Sport
Paleontology Needlework Islam
Metaphysics Investment Archaeology
Parenting Statistics Criminology
Motivational

THE
MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

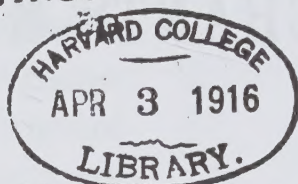
EDITED BY
WILLIAM B. DANA.

~~~~~  
**VOLUME FIFTY-SEVEN,**  
**FROM JULY TO DECEMBER, INCLUSIVE, 1867.**  
~~~~~

New York :
WILLIAM B. DANA, PUBLISHER AND PROPRIETOR.
NO. 66 WILLIAM STREET.
1867.

~~DE LXXXI~~

Econ P 13.1.150



Bright fund

ALPHABETICAL INDEX

TO SUBJECTS CONTAINED IN THE

MERCHANTS' MAGAZINE & COMMERCIAL REVIEW,

VOLUME LVII.

FROM JULY TO DECEMBER, BOTH INCLUSIVE.

EDITED BY WM. B. DANA.

	PAGE		PAGE
A.			
Agricultural census of Rhode Island.	291	Atkinson on the Collection of Revenue.....	15
Agricultural, Egyptian.....	152	Austria, Births and Deaths in.....	332
Albany, Debt and Finances of.....	308	" Central Statistical Commission of.....	329
American Securities (daily price of)		" Marriages in and prices of wheat and rye 1851-66..	331
at London..50, 162, 243, 324, 398,	475		
American Footholds in China.....	472	B.	
Analyses of Railroad Reports, viz.:		Bank (Boston) Returns, 86, 168, 248,	
Central Railroad of New Jersey..	63	328, 407, 479	
Chesapeake & Delaware Canal...	200	" (New York City) Returns, 85,	
Chicago, Burlington & Quincy....	389	167, 247, 326, 406, 478	
Chicago & Northwestern Railroad	217	" (Philadelphia) Returns, 86, 167, 247	
Cincinnati, Hamilton & Dayton		327, 406, 479	
Railroad.....	157	Bank of England Rate of Interest,	
Cleveland, Columbus & Cincinnati		Causes of Fluctuations in the....	249
Railroad.....	134	Bank stocks, Course of prices (8 mos.)	166
Cleveland & Toledo Railroad....	269	Banking Institutions (Obligations of	
Greenville & Columbus Railroad..	306	as bailers.....	393
Memphis & Charleston Railroad..	380	Banking, Currency and Finance, Jour-	
Michigan Central Railroad.....	168	nal of... 82, 165, 247, 326, 403,	
New York & New Haven Railroad	155	Banks, (National) of Boston.....	166
North Carolina Railroad	219	" " New York City.	165
North Eastern (S. Car) Railroad.	220	" " Philadelphia...	166
Benueslaer & Saratoga Railroad..	376	" " the States sev-	
Toledo, Wabash & Western Rail-		erally.. 194, 361	
road.....	41		
Western North Carolina Railroad...	384		

	PAGE.		PAGE
Beer Trade in Germany.....	323	Cotton (Annual) Statement of New Orleans	229
Belgium and Holland, Railways of..	95	" { " } " of Mobile	229
Bonds sold at N. Y. Exchange Board		" { " } " of Charleston	230
79, 166, 244, 322, 398,		" Trade (Statistics) 1866-67..	265
Book Trade (Notices).....	408	" " India railroads & the.	137
Boston Bank Returns, 86, 168, 248,		Course of American Securities at	
328, 407, 479		London (monthly)....	80, 163
" " Dividends, &c.....	390	248, 324, 398, 474	
Breadstuffs (The) Market.....	300	" of Consols (monthly)....	80, 163
Breweries (The) Munich.....	332	248, 324, 398, 474	
" " Vienna.....	332	" of Foreign Exch'ge (monthly)	82
Browne (J. Ross) on Lower California	226	164, 246, 326, 401, 477	
Buffalo, Debt and Finances of.....	196	" of Gold at N. York (monthly)	81
		162, 244, 322, 398, 477	
C.		" of Government Securities at	
California (Lower), its Character and		New York (monthly)....	79, 161
Resources. By J. Ross Browne..	226	244, 322, 398, 475	
Capital and Investments, Growth of		Crops of 1866 in Europe (Statistics)	338
our.....	140		
Canal (A) from the Missouri to the		D.	
Gulf.....	388	Debt of Albany.....	308
Census of Rhode Island.....	9, 291	" of Buffalo....	196
Certificates, The Three per cent....	287	" of Chicago.....	81
Central Railroad of New Jersey....	63	" of Louisville.....	177
Charleston Cotton Statement.....	231	" of New Jersey.....	132
Champagne (The) Trade.....	319	" of Br oklyn City.....	470
Chesapeake and Delaware Canal... 200		" (Public) of the United States.	239
Chicago, Debt and Finances of.....	81	316, 393, 463	
" and Northwestern Railroad	217	Debts & taxation of our large cities.	107
" and Burlington and Quincy		Debts (Our) and Resources....	416
Railroad.....	389	Department Reports.....	446
China (North) Trade.....	127	Dominion (Th.) of Canada and the	
Chontales Gold Mines.....	181	Reciprocal Trade.....	409
Cincinnati, Hamilton and Dayton		Donation Claims (Public Lands)....	277
Railroad.....	157		
Cities and Towns on the Public		E.	
Lands.....	310	Egyptian Agriculture.....	152
Clearing House (yearly report)....	324	Emigration at New York and the	
Cleveland, Columbus and Cincinnati		Emigration Board (Historical and	
Railroad.....	134	Statistical).....	186
Cleveland and Toledo Railroad....	269	Europe, Crops of 1866 in (statistical)	80
Coal (new) Discoveries.....	389	Exchange, (Foreign) at New York..	82
Coin and Bullion, Imports and ex-		164, 246, 326, 401, 477	
ports of... 81, 163, 245, 324, 400,	476	Exchanges (our foreign) since 1861	371
Coin & Bullion, general movement of.	81	Extinguishment of the Public Debt.	413
163, 245, 324, 400,			
Commerce of San Francisco.....	87	F.	
Commercial Chronicle & Review....	76	Finances (Debt and) of Albany.....	308
159, 240, 320, 394, 478		" " of Buffalo....	196
" Law (Insurance) 84, 112, 180		" " of Chicago....	81
Compound Interest Notes (prices)...	80,	" " of Louisville... 177	
162, 244, 324, 398, 475		Fire Insurance (Law).....	34
Consols, Course of (monthly)....	80, 162,	Fisheries and Shore O. ngs of Rhode	
248, 324, 398, 477		Island.....	293
Cooke's (Jay) Letter to National		Food (Consumption of) in Vienna... 230	
Bank Officers.....	402	Foreign Exchange at New York....	82
Co-operative ship building.....	149	164, 246, 326, 401, 477	
Cotton growing & the cotton tax....	302	" (Our) Exchanges since 1861.	371
" movement & crops for 1866-67	264	France, Railways of.....	59
" (Imports of) at Liverpool....	63	Frankfort, U. S. 6s (5-20's) 1863 at.	80
" (Prices of) at N. Y. & Liverp.	269	162, 244, 322, 398, 475	

	PAGE		PAGE
Fuel, Economy in.....	143	Mobile Cotton Statement	230
" (Consumption of) in Vienna...	233	Money Market, The pinch in the....	258
G.		Mount Cenis Railway.....	305
Gold (Exports and imports of) at New		" Tunnel	235
York .81, 163, 245, 324, 409, 476		McOnloch's (Mr.) Annual Report...	442
" (Course of) at New York...81, 164		N.	
245, 325, 401, 477		National Banks, (Quarterly Reports) 194	
" Mining in Victoria.....	313	" Reforms in the....	251
" Movement (general) at New		New Jersey, Debt of....	289
York...81, 163, 245, 324, 400, 476		New Orleans Cotton Statement.....	227
" Premium, Prospects of.....	377	New York Canal Enlargement, Pro-	
" Movement since 1860.....	439	posed Financial Poli-	
Government Securities, (course of) at		cy of the.....	169
New York 79, 161, 244, 323, 399, 475		" City Bank Returns, 85, 167,	
Grasshopper, Army.....	386	247, 326, 406	
Great Britain, Mineral Products of..	360	" " Government and	
Greece, Progress of (Statistical)....	317	Finances	120
Greenville & Columbia Railroad....	303	" City and County Debts	
H.		of.....	233
Holland, Railways of Belgium and		" " National Banks. 165	
Holland	95	" and New Haven Rail-	
Homestead law, (Public Lands)....	208	road.....	155
I.		" Stocks of Merchandise	
India Railroads and the Cotton Trade 137		at..	389
Ireland for 1866.....	70	North Carolina Railroad.....	219
Insurance, (F. W.).....	34, 113	North Eastern (S. C.) Railroad.....	220
Insurance, (Business of) for 1866... 111		O.	
J.		Oysters, Culture of.....	233
Journal of Banking, Currency and		F.	
Finance...83, 165, 247, 326, 402, 473		Perfumery, Manufacture of	223
L.		Personal Census of Rhode Island... 9	
Land concessions for canals.....	236	Petroleum (Public Lands)	216
" for Railroads	233	Philadelphia Bank Returns, 86, 167,	
Lands, (Public) Condition of, June		247, 327, 408, 479	
30, 1866.....	282	Phosphate (Mineral) of Lime.....	236
Lands, Swamp and inundated.....	274	Political Economy, The Scholars and	
Legal Tender Certificates, The three		the Philistines in.....	355
per cent.....	237	Pope's Essay on Man (Notice)... 408	
Life Insurance, (Commercial Law) 113, 180		Population of Rhode Island... 10	
" in the United States. 198		Population and Taxation of Louis-	
Lloyd's List of Wrecks and Casualties 73		ville.....	178
Loans and Discounts, 78, 160, 242, 322,		Precious Metals, The routes of the.. 374	
397		Pre Emption Laws (Public Lands).. 207	
Louisville, Debt and Finances of.... 177		Public Debt, The.....	398
M.		" of the United States, 239,	
Manufactures of Rhode Island..... 294		316, 393, 463	
Manufactures, Tariff and Taxation.. 419		Public Lands (30th June, 1866). ... 232	
Meerschbaum, Artificial.....	386	" of the United States 203, 272	
Memphis and Charleston Railroad... 330		R.	
Merchandise, (Stocks of) at New York		Railroad Accidents, The Prevention	
367		of.....	66
Mexican silver mines, How worked.. 148		Railroad Earnings (monthly), 14,	
Michigan Central Railroad.....	168	131, 198, 266, 337, 427	
Mineral Interests, (Public lands) ... 272		" " (quarterly), 132 338	
Mineral Products of Great Britain.. 341		" Legislation	389
Mining (Our Late Enterprises)..... 47		" Expansion, Proposed pro-	
Mississippi Central Railroad.....	220	hibition of.....	301

THE MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

JULY, 1867.

CENSUS OF RHODE ISLAND, 1865.*

By the settlement of the boundary question with Massachusetts in 1862, the profit and loss to Rhode Island in territory and population was as follows:

In Pawtucket, Rhode Island gained.....	6,930 miles and 4,300 inhabitants.
In East Providence ".....	12.5 " " 1,700 "
Total gain.....	19.4 miles and 5,900 inhabitants.
In Fall River, Rhode Island lost.....	1.12 " " 2,577 "
Net gain to Rhode Island.....	8.2 miles and 2,533 inhabitants.

It need scarcely be repeated that Rhode Island, the smallest State in the Union, is only 50 miles long and 35 miles in width, and that a large portion of this width is taken up by the waters of Narragansett Bay, which, extending inland for some 30 miles, divides the state into two unequal parts, leaving a land territory of only 1,054.6 square miles, with a shore washed by tide-water of 350 miles.

1. PERSONAL CENSUS.

The State is divided into five counties, and these contain thirty-three townships, five of which are situated on islands. The smallest town

* Report upon the census of Rhode Island, 1865; with statistics of the population, agriculture, fisheries and manufactures of the State prepared under the direction of the Secretary of State, by Edwin M. Snow, M. D. Superintendent of the census. 1 vol. 800 p. 112.

(Warren) has only 4.7 square miles, the largest (South Kingstown) has 77.9 square miles. Below we give a table showing the area and population of the State by towns and counties:

	Square miles.	Pop. to square miles.		Square miles.	Pop. to square miles.		Square miles.	Pop. to square miles.
Barrington, Bristol, Warren, }	9.8	1,028	110.5	Barrillville, Cranston, Cumberland, East Prov., Foster, Glocester, Johnston, North Providence, Pawtucket, Scituate, Smithfield, Charlestown, Exeter, Hopkinton, Nor't Kingstown, Sou't Kingstown, Richmond, Westerly, }	53.2	4,861	91.4	
	10.3	4,649	451.8		53.7	9,177	273.8	
	4.7	2,792	594.0		53.6	8,216	244.6	
Coventry, East Greenwich, W. Greenwich, Warwick, }	58.6	3,995	68.2		12.5	2,179	173.7	
	17.1	2,400	140.8		49.8	1,873	88.4	
	49.1	1,328	25.0		54.2	2,286	43.9	
	44.3	7,696	174.1		24.1	3,496	142.5	
Jamestown, Little Compton, Middletown, Newport, New Shoreham, Portsmouth, Tiverton, }	9.5	349	36.7		15.0	14,553	968.8	
	31.4	1,197	55.9		6.9	5,000	724.6	
	12.5	1,019	81.5		52.2	3,538	67.4	
	7.0	12,688	1812.6		73.3	12,315	169.0	
	10.5	1,306	124.5		39.3	1,124	26.6	
	23.4	2,153	92.0		54.0	1,498	26.8	
	21.8	1,973	63.0		43.6	2,512	57.6	
Providence City,	6.7	54,595	8148.9		42.6	3,166	74.8	
					77.9	4,513	57.9	
					38.9	1,890	47.0	
					31.1	3,815	123.4	

The area and population by counties is as follows:

Counties.	Area, square miles.	Pop.	Pop. to sq. miles.
Bristol.....	24.2	8,460	349.5
Kent.....	150.0	15,319	90.6
Newport.....	116.1	30,687	178.2
Providence (including city).....	413.3	122,022	295.2
Washington.....	351.9	18,468	55.6
Total of State.....	1,055.4	184,965	175.4

The density of population in Rhode Island (175.4 to the square mile) is higher than in any other of the United States. In 1865 the population of Massachusetts was 1,267,239, which gives 162.4 to the square mile. In the same year New York had 81.5, and New Jersey 92.9, to the square mile; but between these and Massachusetts, Connecticut has about 110 to the square mile, finds its position. The density of population in France is about the same as in Rhode Island. Prussia, Bavaria, Austria, Denmark, Scotland, Sweden and Norway are less densely populated.

The distribution of the population of course varies the density. The cities of Providence and Newport and the six towns, Bristol, Warren, Cranston, Cumberland, North Providence and Pawtucket containing only 117.9 square miles, but a population of 111,670 persons—11 per cent of the area, and 60 per cent of the population of the State. If we deduct these from the total area and population, we find in the remainder of the State 936.7 square miles, with 73,295 inhabitants, or only 78 persons to each square mile. The seats of manufactures and commerce are denoted by their superior density.

The progress of the State in population is given in the following table:

Census of	Population.	Change.	Census of	Population.	Change.
1708.....	7,181		1800.....	69,123 + (10 years)	297
1730.....	17,935 + (22 years)	10,754	1810.....	77,021 + "	7,909
1748.....	23,718 + (18 years)	14,883	1820.....	83,059 + "	6,039
1765.....	40,414 + (17 years)	7,641	1830.....	97,310 + "	14,151
1774.....	52,707 + (9 years)	12,293	1840.....	108,880 + "	11,570
1778.....	55,011 + (2 years)	4,006	1850.....	147,545 + "	38,715
1783.....	53,847 - (5 years)	2,664	1860.....	174,630 + "	27,075
1790.....	63,635 + (8 years)	10,478	1865.....	194,965 + (5 years)	10,345

The movement by counties during the present century has been as follows :

Counties.	1800.	1810.	1820.	1830.	1840.	1850.	1860.	1865.
Bristol.....	3,801	5,072	5,687	5,446	6,476	8,514	8,907	8,469
Kent.....	8,487	9,834	10,228	12,788	12,082	15,083	17,308	15,819
Newport.....	14,945	16,204	15,771	16,535	16,874	20,007	21,896	20,687
Providence.....	25,354	30,380	35,786	47,020	58,273	87,526	107,799	122,022
Washington.....	16,185	14,963	15,687	15,421	14,324	16,430	18,715	18,468

The progress of the cities of Providence and Newport and the six towns before selected has been as follows :

Cities, &c.	1800.	1810.	1820.	1830.	1840.	1850.	1860.	1865.
Providence.....	7,614	10,071	11,767	15,836	22,173	47,513	60,666	54,585
Newport.....	6,789	7,907	7,319	8,010	8,883	9,563	10,508	12,688
Bristol.....	1,673	2,623	3,197	3,034	2,490	4,616	5,371	4,649
Warren.....	1,473	1,773	1,806	1,800	2,487	2,108	2,686	2,792
Cranston.....	1,644	2,161	2,274	2,652	2,901	4,311	7,500	9,177
Cumberland.....	2,053	2,310	2,653	3,975	5,335	6,661	8,859	8,216
North Providence.....	1,067	1,758	2,420	3,508	4,207	7,980	11,818	14,563
Pawtucket*.....	.....	.....	.....	.....	.....	.....	.....	5,000
Total.....	22,371	28,575	31,485	39,510	49,765	77,447	936,738	111,670

The rate of increase from census to census of the whole State and the two chief places, Providence and Newport, is shown in the following series of reductions :

	Whole State.	Cities.			Whole State.	Cities.	
		Provi- dence.	New- port.			Provi- dence.	New- port.
1790-1800.....	0.4	19.3	0.3	1830-40.....	12.0	37.6	4.0
1800-10.....	11.4	23.3	17.3	1840-50.....	35.6	79.1	14.8
1810-20.....	7.8	16.8	dec. 7.4	1850-60.....	18.8	22.0	9.9
1820-30.....	17.0	43.1	9.4	1860-65 (5 years)...	5.9	7.8	20.7

The increase in the cities from 1860 to 1865—in Providence 3,929, and in Newport 2,180, or together 6,109. The net increase in the towns above designated (not including Pawtucket) was 3,823. The total increase of the State was 10,345. Hence we find that nearly the whole increase has taken place within a very limited area. The agricultural parts of the State increase very slowly, and frequently retrograde. Washington County in 1790 had 18,075, and in 1865 18,468 inhabitants.

Among the facts deduced from the tabular statements accompanying the report the following are interesting.

There were 28,666 dwelling houses in the State 39,208 families, giving 1.4 families and 6.45 persons to each dwelling, and 4.72 persons to each family. In Providence there were 1.08 families and 8.06 persons to each house. There were 926 empty dwelling houses, of which 120 were in Newport, the census having been taken June 1, before the arrival of Summer visitors. Of the 28,666 dwelling houses in the State, 27,959 were constructed of wood, and only 432 of brick and 275 of stone. Even in Providence only 3.64 per cent. were of brick or stone.

More than one-half the colored population was found in Providence and Newport. The total number in the State was 4,087, being 135 more than in 1860, and forming 2.21 per cent. of the total population.

In regard to sex, there were in the State 8,439 more females than males. The proportion of the sexes were as follows :

White population.....	47:80	males, and	52:20	females in each 100.
Colored ".....	43:37	"	56:13	" "
White and colored.....	47:72	"	52:28	" "

* Belonged to Massachusetts up to 1862.

Generally in New England there is, for obvious reasons, a large excess of females in the population, while in the newer States the opposite is true. In the whole country, in 1860, there was an excess of 730,000 males in a population of 31,000,000.

With regard to the nativity of the population the following facts are deduced. Of the 184,965 inhabitants of the State, 75,055 were born in the towns in which they resided, and 37,152 had migrated from the towns in which they were born to other towns in the State; the number of inhabitants born in the State and still living in it having been 112,207. Inhabitants born in other of the United States numbered 33,055, and those born in foreign countries 39,703. Every town in the State is represented in Providence, and nearly so in Newport. Natives of Newport are living in every other town except Glocester. There seems, however, to be no special law governing migration within the State, except the tendency of the population of the smaller towns and farming districts to cities and manufacturing towns.

Every State in the Union, except Oregon, was represented in the population of 1865. The following compares the American born within Rhode Island in 1860 and 1865:

Natives of—	1860.	1865.	Natives of—	1860.	1865.
Maine.....	1,831	1,810	Connecticut.....	4,634	5,439
New Hampshire.....	1,483	1,082			
Vermont.....	692	748	Natives of New England.	133,039	138,106
Massachusetts.....	13,965	17,380	" of other States..	5,167	7,156
Rhode Island.....	109,965	112,207			
Total native born.....				137,206	145,263

The large increase of natives of Massachusetts in 1865 was partly owing to the annexation of Pawtucket and East Providence in 1862.

The foreign population of 1865 represented thirty different countries, and numbered 39,703 persons, making 21.46 per cent. of the total population. The proportion in 1850 was 15.66, and in 1860 21.41 per cent. The following shows the number of foreigners in the State in 1850, 1860 and 1865:

Natives of—	1850.	1860.	1865.	Natives of—	1850.	1860.	1865.
Ireland.....	16,944	26,325	27,030	Germany.....	220	815	297
England.....	4,490	6,856	6,473	France.....	20	123	146
Scotland & Wales..	1,000	1,552	1,403	Portugal.....	58	86	75
British America...	1,084	2,690	3,334	Other countries...	2-5	363	200
Total.....					23,111	37,394	59,763

In the city of Providence the number of foreigners has increased but little for the last fifteen years, while the per centage has decreased. The Providence enumerations show the following:

Census.	Total populat'n.	For- eign.	p. cent.	Census.	Total populat'n.	For- eign.	p. cent.
1845 (city).....	31,747	6,965	18.79	1860 (United States)	50,666	12,670	24.80
1850 (United States)	41,513	10,275	24.75	1865 (State).....	54,595	12,472	22.54
1855 (city).....	47,708	12,229	27.69				
Increase in twenty years.....					22,546	7,427	32.55

The Irish population comprised, in 1850, 68.99; in 1860, 67.61, and in 1865, 68.08 per cent. of the foreign born population of the city.

Taking the whole State together, we find that of the 145,262 classed as American born, 27,946 were the offspring of foreign parents. There is

also included among the native born 3,558 persons of mixed parentage, of which 1,759 had foreign-born mothers and 1,799 foreign-born fathers.

In every 100 persons there are 10.20 under 5 years of age; 10.91 between 5 and 10 years; 10.07 between 10 and 15; 10.06 between 15 and 20; 18.10 between 20 and 30; 14.36 between 30 and 40; 11.20 between 40 and 50; 7.67 between 50 and 60; 4.68 between 60 and 70; 2.09 between 70 and 80; 0.60 between 80 and 90, and 0.06 90 and over. Only two persons attained the century—Sylvia Whipple 102, and Hannah Gully 100, both living in Smithfield on June 1, 1865.

It will be observed that the number under 5 years of age is remarkably low. In 1860, the same class was 11.81, the decline being accounted for from the decrease of births on account of the war. But even this higher number is far below the average of the United States, which, in 1860, was 15.43. In Lower Canada the same class was, in 1852, 18.89 per cent. of the total population.

The report returns a good account of the educational status of the little State. The whole number of children between 5 and 15 years of age was 38,788, of which 33,774 were at school, leaving only 5,014, or 12.9 per cent. who had not attended school during the year. The highest rate of non-attendance was in the manufacturing towns, where the maturer portion of those of the school age were probably employed in the mills and manufacturing establishments. In these towns, also the foreign population chiefly reside, and among the lower classes of these many children are allowed to grow up in ignorance.

In regard to adult ignorance there were in the State, in 1865, 10,181 persons who could not read or write. Of these 15.24 (10.65 white and 4.59 black) per cent. were native born, and 84.76 (Irish 71.83, British 3.84, German 0.43, and others 8.66) per cent. were foreign born. A glance at these figures shows at once and unmistakably the source of the mass of ignorance unveiled, and indicates the direction in which efforts should be made for its removal.

Of 16,910 foreign male persons, only 1,260, or 13.4 per cent., have been naturalized under the laws: and of the whole number of the foreign born in the State (39,703), only one in 31.5 is the owner of real estate.

The number of (184,965) inhabitants of the State that enlisted in the army or navy, during the late war, was 7,521, or one in every 24.6 inhabitants. The number of males between 20 and 50 was 37,474, and hence the same enlistments gives one to every 4.9, or 20.1 per cent. This list includes only the soldiers and sailors of the State residing within its limits in 1865. Those who enlisted and did not return are not included.

The number of different occupations given by the census of 1865 was 348, and the number of persons whose occupations was given was 65,059. The occupations, in which more than 500 are returned, are as follows: blacksmiths 861, carpenters 2,457, clerks 1,927, dressmakers 692, farmers 10,754, (fishermen 497), grocers 631, jewelers 1,215, laborers 5,440, machinists 2,193, merchants 1,150, mariners 1,070, masons 767, operatives 13,604, painters and glaziers 708, servants 3,503, shoemakers 513, tailors and tailoresses 828, teachers 856, teamsters 692.

The productive force of the State is summed up as follows:

Products of agriculture.....	\$7,590,079
“ of fisheries	422,412
“ of manufactures	108,106,395

—making a total of \$111,118,888 per annum. This shows an annual production of \$601 for each man, woman and child in the State. This does not include the products of the whale and other foreign fisheries or other items, which are not found in the productions as reported in Rhode Island.

The agriculture and manufacturers of the State are also accounted for in the volume, but considering the length of the present article we are obliged to postpone any further notice of them to a future time.

Taking the work as a whole we have found it to be the best systematised census that has yet appeared, and we pronounce it highly creditable to its compiler, Dr. Snow, the erudite compiler of the well-known censuses of Providence for 1845 and 1855.

RAILROAD EARNINGS FOR MAY.

The gross earnings for the under-specified railroads for the month of May, 1866 and 1867, and the difference (increase or decrease) between the two periods are exhibited in the subjoined statement :

Railroads.	1866.	1867.	Increase.	Decr'se.
Atlantic and Great Western.....	\$451,477	\$459,870	\$7,893	\$.....
Chicago and Alton.....	339,551	338,691	8,840	.....
Chicago and Great Eastern.....	120,460	89,349	.....	31,011
Chicago and Northwestern.....	725,063	767,736	52,654	.....
Chicago, Rock Island and Pacific.....	335,119	261,916	.....	73,194
Cleveland and Toledo.....	210,783	180,675	.....	30,108
Erie.....	1,101,639	1,122,140	20,508	.....
Illinois Central.....	569,320	477,607	.....	91,643
Marietta and Cincinnati.....	95,664	90,536	.....	5,138
Michigan Central.....	305,196	331,953	.....	31,244
Michigan Southern.....	436,493	358,601	.....	67,892
Milwaukee and Prairie du Chien.....	267,488	119,104	.....	148,383
Milwaukee and St. Paul.....	245,598	230,497	.....	15,101
Ohio and Mississippi.....	283,180	262,939	.....	791
Pittsburg, Fort Wayne and Chicago.....	682,510	578,393	.....	104,218
Toledo, Wabash and Western.....	316,483	229,073	12,645	.....
Western Union.....	86,913	57,853	.....	29,061
Total in May.....	\$3,613,070	\$3,088,325	\$.....	\$334,745
Total in April.....	5,696,340	6,080,673	334,438	.....

The gross earnings per mile of road operated for the same month of the years, respectively, are shown in the following table :

Railroads.	Length in miles.		Earnings.		Difference.	
	1866.	1867.	1866.	1867.	Incr.	Dec.
Atlantic & Great Western.....	607	607	\$990	\$908	\$116	\$.....
Chicago and Alton.....	230	230	1,178	1,109	81	.....
Chicago and Great Eastern.....	294	224	583	400	.....	133
Chicago and Northwestern.....	1,033	1,145	713	658	.....	34
Chicago, Rock Island & Pacific.....	410	410	793	615	.....	178
Cleveland and Toledo.....	173	173	1,218	1,044	.....	174
Erie.....	708	778	1,830	1,443	63	.....
Illinois Central.....	709	709	804	674	.....	130
Marietta and Cincinnati.....	251	251	331	349	.....	21
Michigan Central.....	255	265	1,291	1,172	.....	109
Michigan Southern.....	534	534	814	634	.....	130
Milwaukee & Prairie du Chien.....	224	224	1,143	509	.....	633
Milwaukee and St. Paul.....	275	273	893	545	.....	43
Ohio and Mississippi.....	346	344	833	823	.....	1
Pittsburg, Ft. Wayne and Chicago.....	468	463	1,458	1,235	.....	223
Toledo, Wabash and Western.....	531	521	607	631	24	.....
Western Union.....	177	177	491	327	.....	16
Total in May.....	7,307	7,397	\$617	\$834	\$.....	\$23
Total in April.....	7,307	7,297	790	820	30	.....

The above table shows that the gross earnings of the railroads specified

have fallen off in relation to the gross earnings in May, 1866, to the extent of \$83 per mile operated, which is equal to 9.05 per centum. This presentation of a month's business would be a serious matter not only to those most intimately interested in the several lines, but also to the public generally, were the results shown, either a measure of the business transacted or of the net proceeds of that business; but that they are either the one or the other cannot be admitted, the decline in the amount being the natural effect of the same causes which have operated in reducing prices in every department of business, and do not therefore necessarily show a falling off in *net* earnings.

ON THE COLLECTION OF REVENUE.

(Continued from page 451, Vol. 56.)

One of the great articles of production of Pennsylvania is wheat; the annual value of her wheat is more than the annual value of all her iron and its manufactures. In Pennsylvania, nature has indicated that wheat and other grain would yield the largest result for the least labor, and that grain should be the chief product, until such time as the general supply had become so great as not to yield so large a return for the labor employed as would come from working her vast deposits of iron.

At the time Pennsylvania was settled, England had already established iron works, because Nature had indicated iron as one of the natural products of England, by placing there great beds of coal and iron, and but a comparatively small area of arable land.

The farmer of Pennsylvania wants iron, which exists in its crude form under his own farm. England wants wheat. Let us suppose that, under the circumstances as they are in Pennsylvania, the farmer of Pennsylvania can produce a ton of wheat with twenty days' labor and a ton of iron with thirty days' labor, and let us suppose that, under the circumstances as they are in England, the Englishmen can produce a ton of iron with twenty days' labor but it takes him thirty days' to raise a ton of wheat.

The Englishman wants wheat, and the Pennsylvanian wants iron; exchange is free and the barter is made. It is not necessary to express the exchange in money. It is so many days' labor against so many days' labor. The desires of both are satisfied by an aggregate of forty days' labor, resulting in a ton of wheat and a ton of iron—each where it is wanted. The element of transportation may be omitted, as the same conditions apply to Canada and the United States, which are only divided by an imaginary line.

But now comes in the Government of the United States and claims a portion of the labor of the Pennsylvanian—say six days, and each day's labor is measured in Pennsylvania by one dollar. The Government imposes a duty of six dollars on a ton of iron. But as the ton of iron would cost the Pennsylvanian thirty days' labor, or thirty dollars, he will still give twenty days to wheat, six days to the Government, and import his iron. The Englishman will still expend twenty days on iron and exchange it for wheat.

The desire of the Pennsylvania farmer for iron, of the Englishman for

wheat, and of the United States Government for \$6, will all be satisfied by an aggregate of forty-six days' labor.

But the great iron resources of Pennsylvania are not protected; they must be developed, and the Government is induced to put a protective duty of \$12 on a ton of iron: but \$12 represents twelve days' labor for the Pennsylvanian, who wants iron, and therefore it is better for him to give thirty days to making a ton of iron, rather than twenty to wheat, and twelve to the tax. He does so, and gets his iron. The Englishman, having no market for his iron, and wanting wheat, must give thirty days to raising a ton of wheat. The desires of the Englishman and of the American are both met by an aggregate of sixty days' labor. But the United States has no revenue; it wants \$6, but, having been deluded into imposing a protective tariff, it did not get it, and must now impose a direct tax on the Pennsylvanian equal to six days' labor. The three desires are therefore satisfied only by an aggregate of sixty-six days' labor. To sum up:

The Revenue Tariff satisfied the three desires with.....	46 days
The Protective Tariff with.....	66 "
Waste of labor.....	20 days.

Disregarding all comity with the Englishman, the Pennsylvanian's desire is satisfied.

And he pays \$6 tax to the Government, under a Revenue Tariff, with....	26 days
Under the Protective Tariff, with.....	36 "
Waste of home labor.....	10 days

Any one who has read Prof. Perry's admirable book will see that I owe this demonstration to him.

If we wish to understand how the great iron deposits of Pennsylvania would be developed in a natural manner, we have to take the case in a little different form. Suppose twenty men working one day can make a ton of wheat and thirty men a ton of iron; with free trade, ten men have leisure—ten men are unemployed on wheat. Will they not be sure to be trying experiments on the iron which they want? Will they not slowly but surely learn the trade? But, if the whole thirty men are forced by protection into making iron without ever serving an apprenticeship at it, are they as likely to achieve success?

Let me suppose another extreme case: I am a farmer in St. Lawrence County, N. Y., understanding my business; and with one day's labor I can produce a bushel of wheat; in three days' time I, not having learned the trade well, can cobble together a pair of shoes with great waste of leather. On the other side of the river is a poor, ignorant cobbler sent out from England and placed upon a Canada farm; he can make my shoes in a day, but he requires three days to make a bushel of wheat wherewith to feed his family. Shall I not be protected against pauper labor? If I allow his shoes to cross the river, shall I not be reduced to his level? Shall I ever learn shoe-making and become independent of these foreigners who flood us with their shoes, unless Government compels me to employ three days of hard work on shoes, instead of two days of leisure in cutting up leather and trying to learn at my ease.

But suppose this cobbler moves one mile and comes into the United States—in what respect has his labor changed in its relation to mine? As a consumer he now pays a small portion of the United States taxes, which he must add to the price of the shoes he makes, in precisely the same manner as a moderate revenue duty would have been added to the price of the shoes if he had continued to make them in Canada; do I any longer demand such a tax upon the shoes made by him as shall force me to make them myself? Far from it, I scout the idea of a heavy tax on shoes, and hasten to avail myself of the benefit of his cheap labor; yet in England or in Canada he was a pauper, or so near it as to be called so.

To be consistent in the doctrine of protection to American labor, we should impose the very highest rate of duty in our schedule, upon the laborer, and not upon his product; we ought not to permit this flood of immigration; the immigrants can make great many things which we can make ourselves. Let this duty by all means be *ad valorem* and on a home valuation, so that we may as far as possible exclude the most skillful and intelligent workmen; we don't want the result of their skill when it is exerted abroad, and we shall never prosper if they come here and prevent our attaining it ourselves.

There is danger in the abundance of things. We are flooded with foreign commodities—flooded with comforts and luxuries. Protect us, in order that we may labor: it is a privilege to labor; we want to work harder, to get what we consume, than our natural condition requires. Create an artificial scarcity, so that we may enjoy our full right to labor.

Is it the right to labor for which we should so strive? Is labor the end? Is it not rather what labor will give us that we seek? And if we can get what we want with little labor, instead of much, do we regret it?

"But," says the protectionist, "you will never establish manufactures unless they are protected in their infancy." I believe all baby-jumpers and other devices to aid or protect children in their efforts to walk have been discarded, as it has been found better that they should now and then have a tumble, and possibly one occasionally break its neck, rather than that all should grow up with weak legs, even though their legs should get as strong as they ever would have been by the time the children have become old men. And I believe the same process is healthy for infant manufactures as well as for infant children. The most firmly established manufactures in the United States are those which have never been protected to any extent—such as the various manufactures of wood; of boots and shoes; of heavy machinery, such as locomotives; and, above all, of agricultural implements and tools, of clothing, of sewing machines, and so on, to the extent of the larger part of our home manufactures, some of which have grown up in spite of heavy duties on the raw materials of which they are composed.⁴ It may here be well to consider the meaning of the terms "raw materials" and "manufacturing."

In the common use of the words, raw materials are things which are produced mainly by hand or manual labor, and are therefore true manufactures; but which are changed into finished commodities, not by the hand, but really by machines. We are led to much confusion of ideas by this inaccurate use of words.

We call cotton a raw material, yet to the planter it is a finished commodity, produced by the hand labor of the cultivator of the field, and finished upon the cotton gin.

To the so-called manufacturer, the cotton comes from the gin as a raw material, and in the mill it becomes finished product, as cloth.

But, as cloth, it now goes to a real *manu*-facturer—the sempstress, to whom the cloth is raw material, and who by hand cuts it and makes it into garments; and the garment is now a finished commodity.

But, as a garment, it goes to the farmer, to whom again it is a raw material, by means of which he is enabled to live in comfort, and without which he could not cultivate his farm. It does not cease to be a raw material and become a *finis*-hed commodity until it is worn out; and even then it becomes the raw material of the paper-maker, and may not reach its final end until it has printed upon it an essay “upon the Collection of Revenue,” and is put away upon a library shelf.

In its course, whom shall we protect or give a bounty to?

The manufacturer of the raw cotton?

The manufacturer of the cloth?

The manufacturer of the garment?

The consumer of the garment?

The paper-maker? or, finally—

To the writer of an essay “upon the Collection of Revenue”—who may, at this present moment, really need *personal protection* more than any other?

Shall we not rather seek to collect our revenue as impartially as possible, creating no artificial obstacles to commerce, and leaving each individual to work out his own material salvation, even as he works out his spiritual salvation?

This claim for the protection of infant manufactures never ceases. Under its operation they never seem to grow to manhood, but the larger they grow the more urgent the demand for artificial support. The most urgent and imperative demand for protection now comes from the iron-masters and the wool-growers.

American iron was born into the world more than a hundred years ago, when Pennsylvania was a colony. Great Britain was the mid-wife who presided at the birth, and endeavored to strangle the infant in its cradle; but he, being of a tough and fibrous quality, lived and grew apace, until he could stand alone, if he would only think so. But having been propped up with baby-jumpers and crutches, shoulder-braces, etc., he fears to stand lest he should fall, and demands now to be encompassed with a high wall over which no rude shove shall reach him.

Where the demands of Pennsylvania ever more imperative? Yet what are the facts.

In the fiscal year ending June 30, 1866, a year of very large importations, the total import of iron and steel, and the manufactures thereof, was a trifle over.....	19,000,000
The export of iron and steel, and the manufactures thereof, allowing two-thirds the value of the agricultural implements and printing presses to have been iron and steel, was about.....	5,000,000
Leaving a net import of.....	14,000,000

During the same period, the internal revenue derived from iron and steel of home manufacture, in the forms which are specifically named by law, amounted to \$13,728,133.

The internal taxes alone upon this *infant* home manufacture were nearly equal to the total value of the importation.

It is somewhat difficult to capitalize this tax, as the taxes upon iron and steel were duplicated, and even in some cases quadrupled, but the total value on which this tax was assessed cannot have been less than \$200,000,000, and was probably nearer \$300,000,000. The object in demanding a heavy duty on iron and steel, or any other commodity, can only be to maintain the price in an amount equal to the duty imposed. The demand of Pennsylvania is that the duties shall be raised to a still higher point than they now are, in order to shut out the flood of \$14,000,000 worth of foreign iron, by granting a bounty on over \$200,000,000 of home production. We may well ask Pennsylvania how much longer she will "plead baby?"

I shall perhaps be charged with ingratitude by some of my friends in Pennsylvania, and I might have felt obliged to take another illustration rather than iron, had it not been for the most unreasonable demand of Pennsylvania for a duty on bituminous coal. If not infants in iron manufacture, the men who advocate this duty are infants in intelligence. Suppose New England being without coal, and being obliged to use costly fuel, were to demand that a tax be imposed upon every steam engine used out of New England, and that her own should be exempt; would there not be an outcry which would overwhelm us with scorn and derision? Should we not be charged with the most selfish designs? Yet such a claim would be far more reasonable, than that of Pennsylvania for a duty on coal, which is only a tax on the steam engines of New England, already working at a disadvantage. The impudence of this claim is only exceeded by the ignorance of all economic law exhibited by those who propose it, which ignorance is their only justification.

It is alleged that because we have begun the manufacture of Bessemer steel rails in this country, the price has been reduced by the English manufactures from \$150 to \$110 per ton, or about in that proportion; but those who make this absurd allegation make no note of the enormous extension and improvement in this manufacture in England. If their allegation is true the trade in steel rails in England would be conducted in the following manner. Suppose the parties to be the English manufacturer, the Agent of the Pennsylvania Central Railroad, and the Agent of the Pacha of Egypt.

Penn. Agent.—What is the price of steel rails?

Manufacturer.—For what railroad?

Penn. Agent.—For the Pennsylvania Central.

Manufacturer.—The price is \$110 per ton, delivered.

Agent of the Pacha.—I want an equal quantity at the same price.

Manufacturer.—Our price for Egypt is \$150.

Agent of Pacha.—Have you two prices?

Manufacturer.—Yes, sir; they are endeavoring to establish the manufacture of steel rails in Pennsylvania, and all the English manufactures have combined to break them down; we charge \$110 to Yankees, and \$150 to all others.

Agent of Pacha.—But you make a profit at \$110.

Manufacturer.—Oh, yes, certainly: we don't make a practice of selling at less than cost.

Agent of Pacha.—Good morning, sir; I will get my rails in Prussia, or wait until the Americans get started. If you make a profit at \$110, and charge me \$150, Pennsylvania will soon supply me at less than \$150, even if you supply her own railroads at \$110.

I believe that any business man must see that the alleged effect of the few small steel-rail establishments in this country is as nothing compared to the effect of the competition in England. We cannot cripple our whole railroad system, cause all our transportation to be more costly, and retard the development of our western country, by granting any higher bounties to a few rail-makers, than we now pay. Yet I do not ask Pennsylvania to cease at once to demand duties upon iron and steel, nor would I willingly submit at once to a great reduction in the duties upon cotton manufactures. Any such abrupt changes would destroy capital and reduce production.

Our problem is to maintain capital, and increase production, and this can only be done by a judicious reduction or abatement of internal taxes, and then by a gradual reduction of duties; and I for one have always advocated the entire abatement, first and before all others, of the internal taxes upon metals and the manufactures of metal. The metals are at the foundation of all other industry, and any tax upon them is an impediment to the production of almost every commodity needed by men. It is to be hoped, that, whatever Congress may fail to do in the matter of amending our present onerous tax laws, they will not fail to abate all internal taxes upon metals, and the manufactures of metal, and to refuse all requests for an advance in the duties.

The repeal of the cotton tax should immediately follow, if it should not precede. This tax was never justifiable, except as a temporary expedient; the least onerous method would have been to have collected it of the manufactures for the home consumption, and of the merchants at the port of export. To attempt to collect of the producers checks the change from the plantation to the small farm system, and checks production. It may be added, that the time is not far off, but will come probably within two or three years, when there will be a surplus of cotton in the world. (See appendix C).

I think Boston to-day affords a good illustration of the evils of protection. The conditions of soil, climate and coast, indicated maritime pursuits as the province of New England men; and she engaged in them chiefly until the South forced a protective tariff upon the country. As this destroyed commerce, New England developed textile manufactures before their time, and then, becoming converted to the doctrine of protection, continued to foster them by the same process. The result is, that a large amount of the capital, and a large amount of the business capacity of Boston which should have been applied to railroads, steamships and commerce has gone into manufactures; consequently, Boston commerce declines, and young men emigrate. Commerce would have employed the young men at home, or in voyages ending at home; but textile manufactures employ only a few treasurers, agents or commission merchants, and a very large force of operatives or laborers. There are too many young men for the number of places equal to their capacity, and they must migrate. I think the population of New England has not been improved by this forced establishment of textile manufactures.

If, as I have attempted to demonstrate, a tariff is but a tax under another name, then it is a burden upon the labor of the country, and is subject to precisely the same law as an internal tax.

I now come to another point to which I have adverted, viz, that in the collection of a given amount of revenue, more or less evil could be done, according to the wisdom or unwisdom of the law. Nations which are older than ourselves in the matter of taxes, select certain articles to bear the heavier portion of the burden, rather than lay an even portion on all. It is an axiom, that the consumers pay all taxes in the long run; but this should always be qualified by adding, that their consumption of taxed commodities is regulated by their production. The great body of consumers and the great body of producers are identical, and they procure the taxed articles which they consume in exchange for the articles they produce.

The articles thus selected for taxation are tea, coffee, sugar, spices, spirits, tobacco and other commodities, the consumption of which is voluntary, and the deprivation of which does not impede production. None of the articles named are essential to production, in the sense that meat, bread, iron and clothing are essential; and therefore the consumer may use a little more or less, according to the price, and still cultivate as many acres or operate as much machinery. England keeps her custom-house because tea, coffee, sugar and spirits are natural subjects of taxation; but, if they were all produced in England, she would tax them by an excise duty at the same rate, and abolish her custom-house.

But now let us see if we really limit the power of the consumer to purchase tea and coffee, by a high duty on them, and no duty on iron, rather than by a moderate duty on each. Let us return to the Pennsylvanian and the Englishman, and remember the relative condition of labor on iron and wheat.

Let us suppose that each was employed the whole year, save thirty days, in feeding and clothing his family, and has just thirty days to give to accumulating a surplus of capital. The Englishman, for some reason, desires to have, as the representative of his surplus labor amounting to thirty days, a ton of wheat, which he can make in thirty days; but he can make a ton of iron in twenty. The Pennsylvanian must have a ton of iron, which he can make in thirty days; but he can make a ton of wheat in twenty. By free exchange, each can satisfy his desire with twenty days' labor, and each will thus have ten days to spare.

Wanting tea, each will work upon some commodity to exchange for tea. We will say that the Pennsylvanian wants five pounds of tea, and with five days' work can get it free of duty; the Government puts a duty on tea equal to five days more, but the Pennsylvanian still has five days to spare and works it out. He has his ton of wheat, his five pounds of tea, and has paid five days work or five dollars to the Government. But, under a system of protection to iron, by which the Pennsylvanian has been caused to give thirty days to iron, he has only the iron; he has no tea; the Government has no revenue, and must now take a part of his ton of iron.

Free exchange of the results of labor, free trade, free commerce, gives to each nation the advantage of the different gifts of soil and climate which God has bestowed upon the several sections of the earth. It in-

creases the abundance of the things which give comfort or enjoyment to all people. It does not degrade the labor, or reduce the purchasing power of the wages in the most favored country, like our own; but, while it would yield to us more comfort and more luxury, it would elevate the oppressed of other nations and civilize the barbarian.

The individual laborer, who is skilful in farming, or well placed on good land, and whose wages are high because his product is large, does not give up his occupation and go to making shoes because some poor shoemaker near him is starving and willing to work cheap; then why should Uncle Sam, with his rich farm, and his domain, scarce touched by the hand of man, refuse to employ the pauper labor of Europe, of which we hear so much, because the paupers work cheap?

Much of this hue and cry about pauper labor is merely clap-trap, the pauper labor of England is mainly in the agricultural counties. Of the same nature is the common talk about the flood of foreign commodities with which we are overwhelmed. Let any one analyze the imports for the year 1866, and out of \$868,000,000 on which duties were paid he will find less than \$68,000,000 consisted of articles of luxury, and over \$800,000,000 were articles of comfort or of necessity. It is alleged that the total value of all our products in the year 1866 was \$6,000,000,000; and it is tolerably well ascertained that the value of all our products in 1860 was \$4,000,000,000, on a gold basis. If the estimate for 1866 is correct, then our flood of foreign luxuries was about equal to one per cent on our production!

Upon the third premise, which seems to me fundamental, viz, that gold and silver, either in the form of bullion or money, are only useful up to a certain amount, which will define itself, if let to natural laws, I shall spend but a moment.

Gold and silver, or specie money, has been adopted by the world as the measure of value of all commodities, and, being an article of universal desire, it has value in relation to other commodities in the proportion which the labor required to mine, smelt and refine the specie bears to the labor required to produce the other commodities. Now if the exchange of all other products of labor be left free, except so far as the need of revenue causes a tax to be imposed upon the so-called natural subjects of taxation, then the exchange of specie as one of the products of labor must be left free also, and it will follow the natural law, remaining where it is wanted most. The country which continues to use it as a measure of value will want it more than the country which has substituted paper as measure, or wampum or cowrie shells, or any other substitute which ignorance or necessity may devise, and the country which wants it will get it because it will give more of other products of labor for it, unless those products are prevented from entering the country which has the gold. If importations are prohibited or retarded, then gold remains in the country unnaturally, and causes an advance in prices the same as an issue of paper money. If we could prohibit imports absolutely, and continue to mine \$100,000,000 of specie a year, its value in this country, in relation to other commodities, would, of course, be far less. This was done in Japan. Japan produces gold. but, by non-intercourse, it had so accumulated it as to cause it to lose a part of its purchasing power, or relation to other products; and the first outside barbarians who opened

trade with Japan, obtained much more gold for their commodities than they could have got elsewhere.

We can take the same position in the world as Japan, if we inflate our currency and prohibit imports; but our gold will then have no value except in the arts, as paper can be made with less labor than gold can be mined.

Taxation of any kind is surely a burden, but it has its compensation. The desire to live as comfortably, or, in other words, the desire to produce as much for one's own use, despite all taxes, stimulates invention; and every invention, by increasing the productive force of the laborer, increases the result. The invention of improved agricultural machinery kept our crops increasing all through the war, and I suppose we can now produce as much more than we formerly could as would suffice to pay all the taxes without using any more effort or expending any more hours of labor in the aggregate; but the trouble is, the increase is not equitably divided, and cannot be under our present system of currency: therefore the burden presses more and more upon the mass of the people, and will continue to do so until the proper correctives are applied.

Now as to the correctives. The first essential thing to be observed is not to make any rapid change. Because it would have been better to have collected the revenue from what I have called the natural subjects of taxation at the beginning and up to the present time, it by no means follows that we should jump to that system at one bound.

Our industry has been diverted from its natural channels by protection, and we must slowly and cautiously guide it back, else we may all be paralyzed. We need the immediate establishment of a permanent board of Commissioners of Revenue, consisting of at least five competent men, secure in their tenure of office, well paid, and selected because of their fitness and ability. Mr. Wells alone, with work piled upon him which five men could not have accomplished in the very best manner in the time given, has yet made a report of inestimable value, and such as was never presented to the country before.

A permanent board, known to have the matter of revenue in charge, would take it mainly out of party politics. The people could not afford to have it trifled with. The Board of Commissioners would prepare changes and give fair warning, thus giving each branch of industry time to prepare, and preventing disaster.

Slowly, but surely and safely, can this country be brought to a system by which it shall secure an ample revenue from almost as few articles or interests as are now taxed in Great Britain. If any one doubts this, let him consider. We have now, as I suppose, a larger population, and though not as much accumulated capital, yet, what is more valuable, a better educated people, and a country whose resources have hardly been touched, and whose productive capacity may be indefinitely increased. Can any one doubt that a given number of hours of American labor will yield a larger result than a given number of hours of English labor? Aggregate all the American laborers into one, and all the English laborers into one. Put the Yankee education and the Yankee versatility, and the innumerable labor-saving devices of the Yankee, and also the varieties of our soil and climate, against the great works and mills, and greater accumulated capital of the Englishman, and which would get the greatest

result for his labor? I think every one here will honestly answer, The Yankee.

Then he will consume more tea and coffee and sugar and spirits and spices, and have a greater income, and require more stamps to represent more transactions, than the Englishman; and, consequently, the same rates of tax upon these various items will pay our larger rate of interest, but our less cost of army and navy and civil service, and pay our debt besides as rapidly as it should be paid. We are paying debt too fast now. The faster we try to pay at the beginning, the longer we shall be in paying the whole.

The Secretary of the Treasury estimates the expenses of the Government, for the fiscal year, ending June 30, 1868, as follows, in round numbers:

Civil service.....	\$50,000,000
Pensions and Indians	25,000,000
War Department.....	50,000,000
Navy.....	30,000,000
Interest.....	135,000,000
Total.....	290,000,000

We may soon reduce the expenses of the War and Navy Departments to an aggregate of \$50,000,000, and ought to increase the interest to \$150,000,000 by funding the legal tenders. The estimate would then stand:

Civil Service, Pensions and Indians.....	\$75,000,000
War and Navy.....	50,000,000
Interest.....	150,000,000
	<u>275,000,000</u>
Add for reduction of debt.....	25,000,000
Total.....	\$300,000,000

Population increases by births and immigration more than three per cent per annum on the average, but production increases in a much greater ratio; and rates of taxation so adjusted as to yield \$300,000,000 now would doubtless yield \$400,000,000 within ten years. The expenses of the Government would doubtless increase, but, in the absence of war, not more than the saving of interest on the debt annually paid would amount to.*

* If consumption should only increase at the rate of three per cent per annum, the rate would, in ten years, cause the avails of taxes to be about thirty per cent more. The rates of taxation, which would now give \$300,000,000 would then give \$390,000,000.

If consumption should increase five per cent per annum, that rate would yield in the tenth year about \$450,000,000.

If we allow an increase of consumption at the rate of five per cent per annum, the following sums would be available in each year for the payment of debt, and in this estimate I allow a present need of \$300,000,000, and that our expenses shall increase

Let us now see how near we have already come to securing the sum of \$300,000,000, from the sources from which revenue can be derived with the least injury.

In the fiscal year ending June 30, 1866, the taxes imposed, either under the Tariff or Internal Revenue Laws upon the following articles of interest: Incomes, Stamps, Licenses, Banks and Insurance Companies, Legacies and Successions, Gross Receipts of Railroads, Canals, Lotteries, Telegraph Companies, etc., Tea Coffee, Sugar, Spices, Spirits and Wines, Fermented Liquors, Tobacco, and Manufactures of Silk, amounted to about \$260,000,000, of which over \$80,000,000 was in gold from the Customs.

The Income tax will be reduced by being made uniform, but the tax on spirits will be increased by the enforcement of the law, it having been over \$37,000,000 in the calendar year ending Dec. 31, 1866, against \$29,000,000 in the fiscal year ending June 30, 1866.

It may be alleged that this year yielded more than an average, and there is some force in the objection; but, if we remove the internal taxes on iron, steel and on manufacturing generally, that is if we remove the impediments to production, I believe the consumption of tea, coffee, etc.,

as fast as our interest decreases, or that we shall only decrease debt by the amount we get over \$300,000,000.

Year	per cent		Year	per cent	
1st on 300,000,000,	5....	\$15,000,000	12th on 300,000,000,	60....	\$180,000,000
2d "	"	10....	13th "	"	65.... 195,000,000
3d "	"	15....	14th "	"	70.... 210,000,000
4th "	"	20....	15th "	"	75.... 225,000,000
5th "	"	25....	16th "	"	80.... 240,000,000
6th "	"	30....	17th "	"	85.... 255,000,000
7th "	"	35....	18th "	"	90.... 270,000,000
8th "	"	40....	19th "	"	95.... 285,000,000
9th "	"	45....	20th "	"	100.... 300,000,000
10th "	"	50....			
11th "	"	55....			\$2,150,000,000

Or in less than twenty years the whole debt will be paid, and we should have \$500,000,000 to spare to build two or three Pacific Railroads, a ship canal across the Isthmus of Darien, and a few more works of the like character.

If we allow an increase of the results of taxation at the rate of the increase of population, say only at three per cent, and allow \$300,000,000 as the constant amount required for expenses and interest, we have the following result:

Per cent	Year		Per cent	Year	
3 on 300,000,000,	1st....	\$9,000,000	3 on 300,000,000,	14th....	126,000,000
" "	2d....	18,000,000	" "	15th....	135,000,000
" "	3d....	27,000,000	" "	16th....	144,000,000
" "	4th....	36,000,000	" "	17th....	153,000,000
" "	5th....	45,000,000	" "	18th....	162,000,000
" "	6th....	54,000,000	" "	19th....	171,000,000
" "	7th....	63,000,000	" "	20th....	180,000,000
" "	8th....	72,000,000	" "	21st....	189,000,000
" "	9th....	81,000,000	" "	22d....	198,000,000
" "	10th....	90,000,000	" "	23d....	207,000,000
" "	11th....	99,000,000	" "	24th....	216,000,000
" "	12th....	108,000,000			
" "	13th....	117,000,000			\$2,702,000,000

or more than the entire debt in twenty-four years.

the use of stamps and the aggregate of incomes, would increase; at any rate we could safely count on \$250,000,000 from such sources. In confirmation of which opinion see the letter of Hon. D. A. Wells hereto appended.

If we can get \$250,000,000 from these sources, we should have but \$50,000,000 left to obtain from all other foreign imports; but to reduce the duties thereon so as to yield but \$50,000,000 would be too abrupt a change—it would be better to raise \$75,000,000. The latter sum would probably be yielded by a tariff at about the present average rate of forty-eight per cent, less twelve to fifteen per cent reduction, as the equivalent for the reduction in internal taxes—say by an average rate of duties of thirty-three and a third per cent. Such rate would really give as much protection to home industry as the present tariff, if home industry is relieved from the present onerous internal taxes. There are few textile manufacturers, or none, who would not say that a net duty of thirty per cent on foreign imports would be better for them, with the internal taxes removed, than the present high rates of duty are with the internal taxes as now imposed.

To this practical agreement I believe New England manufacturers would come. The protectionist would say, twenty-five to thirty per cent net duty gives us all we want; and the free trader would say, We advocate for the present twenty-five to thirty per cent net duty for the purpose of obtaining revenue. The result is the same, but it is of the utmost importance that we start from the free trade rather than the protective point of view. The free trader cannot be swerved from a uniform system, because he looks upon the whole thing only as a necessary evil; but the protectionist is constantly in danger, because he thinks he can confer a benefit and is therefore at the mercy of each special interest.

Hence the futility of the attempts to pass a tariff bill at the two last sessions of Congress. Each man put in his brick, until the whole structure became absurd and ridiculous, and at last it all tumbled to the ground together.

When the Committee of Ways and Means shall frame a moderate tariff, as a revenue measure, upon a fixed principle, firmly assuring the representatives of each special interest that they must adjust themselves to it as best they may, it will be very certain that the common sense of the people will compel the enactment of the law thus framed.

The question of protection has been much complicated, during the late sessions of Congress, by the claim made by the Western and Middle States for protection to agricultural products and upon materials in their primary or secondary condition, such as copper ore and regulus, raw and lined flax, hemp, jute, linseed, hides, goat-skins, salt, etc. It would seem as if the West had suddenly come to the conclusion that New England, by means of protection to manufactures, had been making money out of them, and that it was time for them to get a return from New England.

I cannot deny that if New England has derived benefit from the bounty granted under the name of protective duties, which I doubt, so far she has prospered at the expense of the rest of the country. I do utterly deny, however, that this special benefit has been intentionally secured by the advocates of protection. They have, and do still earnestly believe, that protection is a benefit to the whole community, and that their own

gain is but a proportional part of the general gain. I think, however, they will find it somewhat difficult to meet the claims of the Western men, if they adhere to the doctrine of the expediency of protection; and that such is actually the case, is proved by the recent combination of the wool growers and the woollen manufacturers.

The wool growers' claim has been admitted, and a protective duty has been placed upon foreign wool. This claim might have been presented in a much stronger manner than it has been. The wool growers might have said to the manufacturers, "You advocate protection to American labor, and insist that you are its representatives because you are manufacturers: your claim is well grounded. American labor should be protected, and, if this is to be secured by protection to manufactures, *we* are the real manufacturers. Nature has given such conditions of climate and soil to Ohio that to make wool we must *with our hands* build fences and barns, and cultivate the land, and also shear the sheep. Our wool is manufacture; and, in numbers, we, the agriculturists, are greater than those who operate your machinery.

The manufacturers of woollen fabrics must admit the claim, and they have done so. The result is a higher bounty to each of these interests.

The claim of the wool grower cannot be met by an advocate of the principle or expediency of protection, but can be easily controverted by the advocate of free trade. What is the claim of the wool grower of Ohio but this, that he shall substitute human labor for the free sunshine which nature has given to South Africa, to Syria, and to South America; and that the community who use wool in the form of woollen garments must be made to pay for such useless labor.

The wool of South Africa and South America may be said to represent four parts sunshine and soil, gratuitous and common to all, to one part of human labor measured at the rate of twenty-five cents per day. The wool of Ohio represents, on the contrary, two parts of sunshine and soil, to three parts of human labor measured at the rate of \$1 per day.

Protection to wool is only an artificial impediment by which we shall be prevented from enjoying the large bounty of nature with which God has endowed South Africa in this one respect. We refuse it, because it is gratuitous and common, and, as a nation of 36,000,000, we charge ourselves with a bounty for the possible benefit of half a million interested in wool growing.

Bastiat's satire, in the form of a petition of the candle-makers and tallow-chandlers of Paris to be protected against the light of the sun, by having all the windows closed, and the streets roofed over, is not more absurd.

On the other hand, can the manufacturer of woollen cloths and other fabrics substantiate his claim to protection? He has no greater claim to a bounty; and has, at this time, only a right to be spared the disaster which a sudden change in the revenue policy would cause.*

To the advocate of a revenue tariff, from the free-trade stand-point, the

* Such disaster as overwhelmed the manufacturers of worsted goods, when by the sudden, and as I believe most unwise abrogation of the Reciprocity Treaty, the coarse Canada wool, which had been free, became subject to a heavy duty.

problem is perfectly simple. His ground is this. If we had no expenses, we should need no revenue, and our industry would assume that exact measure of diversity which our soil and climate indicated, and the intelligence of our people rendered possible. Our true prosperity would consist in the abundance of the commodities which we desire and use, and not in the amount of money by which we measure them. Our laboring people would secure the most comfort and the most rapid progress, not by high wages—the result of an artificial scarcity—but with low wages and a natural abundance of commodities.

But we must have a revenue; how shall we obtain it? Free trade and direct taxation we almost unanimously reject, and protection we equally reject.

Should we not then first tax such articles as are not of prime necessity—such as tea, coffee, sugar, liquors, spices and silk goods; next, the interests which are the farthest removed from labor—such as licenses, incomes, stamps, banks and the like?

When we have exhausted these sources of revenue, should we not rather levy a duty upon such commodities as represent the larger amount of human labor, skill and invention, and the lesser amount of the gratuity of Nature?

Wool, hemp, jute, cotton, copper, ore, salt, linseed, hides, skins and the like represent commodities which are the product mainly of Nature, supplemented by a small degree of the effort or labor of man, and that labor of the lowest grade. If we place an obstacle in the way of the importation of the free gifts of Nature, we place ourselves at a disadvantage as compared with all other nations who accept them thankfully.

We would select rather, as the sources from which we can derive the remainder of our revenue with the least disadvantage, such commodities as are mainly the result of human labor or skill, and these we find in what are called manufactures; in these we find but a small portion of the gratuity of nature, and a large portion of the skill or invention and of the labor of man. And as other countries have, in the production of certain manufactures (using the word manufactures in its ordinary sense), greater skill, and more abundant and cheaper labor than we have, we can impose a tariff for revenue upon such manufactures, from which shall arise a certain amount of stimulus to home production; but which, being imposed at a rate representing a sum less than the difference in the measure of the labor required to produce it at home, will yield the revenue at a cost to the community of the revenue itself and no more.

I cannot close this treatise in a better manner than by submitting the following propositions:

Perfect protection is impracticable; but, if practicable, would cause all revenue from imports to cease, and render direct taxation imperative.

If perfect and equal protection were practicable, it would simply result in a general rise in prices and wages, and since it would prevent exports and consequently imports, it would decrease the aggregate of commodities, or in other words, the aggregate result of labor; and since capital is the surplus result of labor, a decrease in the aggregate would be a decrease in the surplus. The amount of capital would therefore be less in proportion to the number of laborers, and this condition of things would be to the disadvantage of the laborer, since, as we have before quoted from

Bastiat, "In proportion to the increase of capital, the absolute share of the total product falling to the capitalist is augmented, and his relative share is diminished; while on the contrary the laborer's share is increased both absolutely and relatively."

Imperfect, or partial protection adds to the tax which accrues to the Government a bounty to individuals or classes, in many cases more than equal to the amount of revenue secured by the Government.

A duty or tax upon articles which are mainly the result of a small amount of unskilled labor, by which the gratuities of nature are put into form for use, and which are known as raw materials, is an impediment to the use of the free gifts of God, which should be common to all. The nation imposing such a duty places itself at a disadvantage as compared with all other nations.

A duty or tax upon articles which are mainly the result of human labor, aided by the largest amount of skill or invention, commonly known as manufacturers, will yield a revenue at the cost to the community only of the revenue thus raised.

Protection decreases the abundance of commodities, and increases the absolute share of a small number of the people at the cost of a portion of the relative share of each.

Free Trade increases the abundance of commodities, gives to each the relative share which his education, skill or capital entitle him to, and leads to the harmonious development of the powers of all.

We shall reach specie payment, not by the prohibition of imports but by the increase of the products of labor, other than gold or silver, to such a point that other nations will buy them on account of their cheapness, rather than our specie, and thus enable us to retain specie and export cotton, oil, wheat, etc., in full for our imports.

The larger portion of the revenue now required by the United States can be obtained from commodities which are not absolutely necessary to the productive power of the people, and the remainder from a moderate revenue tariff which shall cost the people only the amount of revenue thus obtained.

A reduction of the aggregate of taxation from \$16.04 currency or \$11.46 gold per head to \$8.60 per head will yield a revenue sufficient to meet the probable expenses of the Government, and pay the debt in less than twenty years. (See appendix B).

The amount of \$8.60 per head can now be obtained from very moderate rates of taxes and duties, as compared with what we have been paying; and, as wealth, production and consumption, increase faster than population, a less and less rate of tax or duty upon commodities or interests will yield the requisite amount per head.

To secure these benefits, stability is absolutely essential; and no stability is possible until we mature and persistently follow a system in regard to the currency which shall, as soon as possible, lead us to specie payment. An inconvertible paper currency enables the few to tax the many in the most onerous and unjust manner, and judicious but uniform and persistent contraction of the currency is the first and most imperative duty of the Government.

As some surprise has been expressed, that these views should emanate from a manufacturer of cotton goods, I will add that I believe a gradual

and judicious reduction in the duties upon foreign commodities, in the manner proposed—of course preceded by an entire abolition of the internal taxes upon manufactures—will result in a more permanent and uniform condition of prosperity in the manufacture of textile fabrics, as well as of all other commodities, than we have ever yet enjoyed. If we can come slowly but surely to what is called British Free Trade, we shall share in the increase of wealth which that system has brought to Great Britain—only the benefit to us would be greater, as our natural advantages and variety of resources are greater. British Free Trade is the result of the longest experience and the greatest amount of intelligence applied to the collection of revenue; I trust it may not be many years before the people of England will learn from us the true principles upon which the laws relating to the tenure of land, the Church establishment and popular education should be based. Upon these points they are yet under the control of protective or bounty laws of the most vicious character, and which render the increase of wealth which they have derived from the modifications of their revenue system less beneficial because of the partial and inequitable division of such increase of wealth which they cause or permit.

The world demands to be supplied with the various commodities called manufactures, such as textile fabrics, iron ware, agricultural implements, etc., etc. The question is, who shall supply such commodities? Thus far, the practical answer has been, England; and we may well ask ourselves why this has been. Labor is not as cheap in England as in Germany, neither is labor as cheap in England or Germany as in India or China; yet the dear laborer of England rather than the cheap laborer of Germany supplies the inhabitants of China and of India with textile fabrics. Why is this? A complete answer could only be given by a Buckle or a Lecky; but we may glance at some of the causes.

1. The possession of large deposits of coal and iron first enabled England to supplement manual labor by cheap machinery.

2. The intelligence of England soonest relieved commerce from the trammels and fallacies of the "mercantile system."

3. The possession of coal and iron in abundance having enabled England to thrive in spite of the Protective System to which she long adhered, she has led all other nations in the adoption of what is called British Free Trade, and by that has been enabled to accumulate wealth faster than other nations which have a better although not the best system of land tenure, like France, or a far better system of education, like Germany.

4. Under the system of British Free Trade she receives from all parts of the world such commodities as their conditions of soil, climate and population, enable them to produce cheaper, paying therefor in the commodities which she can produce better or cheaper than they. She places no artificial obstacle in the way of any import because it is cheap, but simply imposes duties, *for revenue*, on a few articles of universal consumption and difficult to smuggle.

How shall we compete with England in supplying the demand of the world, for commodities, and thus secure to ourselves a greater abundance of the necessities, comforts or luxuries of life, for such is the only incentive to commerce or exchange? Neither nations nor individuals will ever es-

establish trade of exchange with each other unless each shall in the long run get more than he gives. No permanent trade is possible where the satisfaction or gain is all on one side. The mutuality of services rendered, is essential to the continuance of mutual exchange or trade.

We want more foreign luxuries and comforts than England, because the great mass of our people can afford them better, and we have more natural resources than England, in the shape of easily worked mines, a better climate for the breeding of sheep and the product of wool, almost a monopoly in ordinary times in the production of cotton, and in all farming operations a superiority in natural advantages hardly to be measured, and therefore we have far greater power to create wealth, and in the production of wealth to combine the larger amount of the gratuity of nature with the smaller amount of labor.

I can only see one answer to the question, how we shall compete with England in supplying the world with manufactured articles, and that is by adopting the same system of British free trade as soon as our need of revenue, and a cautious, slow and judicious method in making the change, will allow us to do it.

Freedom of trade, leads to the free movement of the laborer, and he will surely seek that country where he can secure the most comfort and the best conditions of life in return for his wages and it matters not whether his wages be measured at a high or low rate. Our natural advantages would have induced a larger immigration, and would, I believe, have been more firmly established to-day and upon a larger scale than we have ever dreamed of, had we not impeded the importation of foreign commodities by protective duties, and thus confined ourselves mainly to the home market for our manufactures. We shall again share with England in the commerce of the world, and in the profit of that commerce, when we cease to deprive ourselves of the benefit of our natural advantages over England, by adherence to the principle, or rather the want of principle, involved in laws imposed for the purpose of protection.

DEBT AND FINANCES OF CHICAGO.

The tenth annual statement of the Comptroller of Chicago, covering the fiscal year ending April 1, 1867, supplies full information relating to the financial affairs of the city and the transactions of the year then closed. The following is a statement of the public debt outstanding at the end of the fiscal year :

Muni. (paid Debt (old issues), viz :			Municipal Debt (schools), viz :		
3	p. c. bonds, due July, 1866.....	\$1,000	7	p. c. bonds, due July, 1866.....	\$25,000
2	" due Jan., 1867.....	1,000	7	" due Jan., 1866.....	26,000
2	" due Jan., 1874.....	60,000	7	" due Jan., 1867.....	30,000
10	" due Jan., 1868.....	1,000	Firewater Debt, viz :		
6	" due July, 1873.....	50,000	7	p. c. bonds (1st loan).....	\$413,000
6	" due July, 1874.....	40,000	6	" (1st loan).....	87,000
6	" due July, 1875.....	100,000	7	" (2d & 3d loans, including	
6	" due July, 1876.....	100,000	40 bonds charged S. Lind, Treasurer 850,000		
Municipal Debt (new issues), viz :			River Improvement Debt, viz :		
7	p. c. bonds, due Dec., 1873.....	\$39,000	7	p. c. bonds, due July, 1890.....	\$163,000
7	" due Apr., 1881.....	904,500	Water Debt, viz :		
7	" due Apr., 1885.....	24,000	6	p. c. bonds.....	1,080,000
7	" due July, 1896.....	25,000	7	"	790,000

RECAPITULATION.

	1866.	1867.		
Funded debt (old issues).....	\$336,000	(\$553,000	Decrease..	\$21,000
" (new issues).....	990,500	992,500	Increase..	2,000
School construction debt.....	50,000	70,000	Increase..	20,000
Sewerage debt.....	1,226,000	1,269,000	Increase..	43,000
River Improvement debt.....	92,000	163,000	Increase..	70,000
Water debt.....	1,669,000	1,690,000	Increase..	21,000
Total funded debt	\$4,353,500	\$4,737,500	Increase..	\$404,000

The floating debt of the city, consisting chiefly of certificates given for temporary loans, payments for schools and sanitary purposes, judgments, water fund, etc.—

Amounted to.....	\$398,926 12
Bills payable (\$4,850), warrants on Treas. (236,114 04), and city orders (\$174 34)	240,638 38
Making a total floating of.....	\$639,564 50

The amount in the treasury at the close of the fiscal year to the credit of the several funds was \$778,990 66. The amount of warrants and city orders outstanding drawn upon the treasury was (as above) \$236,288 38. Net balance to credit, \$542,702 28. It will be seen from the above exhibit that the bonded debt is gradually increasing; and, the Comptroller continues, "if we keep pace with our rapid increase of population, it must continue to increase upon us for many years to come. The water-works will require during the present year (1867-68) not less than \$300,000 to complete the buildings, engines, and improvements that are imperatively demanded. The erection of school buildings, sewerage, river improvements (deepening of the Illinois and Michigan canal), and tunnels, will add, perhaps, \$500,000 to \$800,000, so that at the end of the present fiscal year the bonded debt of the city will not fall much short of \$6,000,000; and when all these improvements shall have been completed, for which bonds are authorized to be issued, the bonded debt cannot vary much from \$10,000,000, of which about \$5,000,000 have been provided for, to be paid by receipts from water, sewerage, sinking fund, and probable State assumption of river improvement bonds. The total city debt at the present time is \$5,397,064 50. Of this sum \$398,926 12 is for temporary loans, viz.: \$222,159 81 for the water works (to be paid from the proceeds of bonds to be issued) and the balance for school purposes (purchase of lots and erecting school buildings) sanitary expenses, judgments, &c." The rate and amount of tax levied, and the purposes for which levied for the service of the year ending April 1, 1867, were as follows:

Purpose.	Rate.	Amount.	Purpose.	Rate.	Amount.
General fund.....	4½ p. 1,000	\$396,789 03	Sewerage fund.....	2 p. 1,000	\$171,906 50
General sinking fund. 1	"	88,963 25	Street & alley fund....	2	171,906 50
Interest fund.....	1	88,963 25	Street lamp fund.....	1½	73,929 88
Improvement fund....	1	88,963 25	Temp'y loan fund....	¼	42,976 62
Police fund.....	3	257,869 73			
Reform school fund...	¼	42,976 62	Total.....	20 p. 1,000	\$1,719,965 00
School tax fund.....	3	257,869 73			

The receipts from general taxes for the year, including \$44,735 64 collected on the tax warrants of 1863 and 1865, amounted to the sum of \$1,559,502 84; the receipts from special assessment warrants, including miscellaneous receipts from the Board of Public Works and other sources, to \$478,540 43; from licenses \$153,858 84; from fines in the police

courts \$81,038 45; from Recorder's court, rents, &c., \$15,580 63, and from a judgment \$25,492 20. Including \$901,863 17 balance from previous year, bills payable \$159,226 11, and bonds \$6,400, the total means of the city treasury amounted to \$4,864,933 44.

The principal disbursements were on account of: Public works \$385,871 17, certificates \$120,575 00; Bridewells and cemetery \$55,227 07; evening schools \$6,957 08; Fire Department \$254,409 41; fuel \$31,217 23; health department \$61,387 86; interest \$100,612 79; judgments \$22,151 11; lamp districts \$120,922 21; permanent improvements \$15,391 13; printing and stationery \$17,585 66; police \$307,811 44; Receiver's court \$28,591 92, redemption \$13,861 18; Reform school \$73,299 09; river improvements \$129,162 37; salaries \$47,247 50; schools \$412,367 55; sewerage \$416,546 48; sewerage, sinking fund, \$20,842 50; special assessments \$685,903 76; tunnel \$19,265 85; water \$666,791 89, &c., &c.—total \$4,085,942 78, leaving in Treasury \$778,990 66.

The following statement gives a summary view of the population, valuation and taxation at the stated periods for the past 30 years:

Year.	Total pop- ulation.	Assessed Valuation. R'l Est'te.	Personalty. p. cap.	Valua. Total.	Valua. p. cap.	Taxation. Am't p. \$100.
1837.....	4,170	\$238,849	\$	\$238,849	\$56 80	\$5,905 16
1840.....	4,479	94,437	.....	94,437	21 15	4,731 85
1843.....	7,580	969,221	479,098	1,441,314	190 14	8,647 89
1845.....	12,088	2,272,171	791,851	3,065,022	253 66	11, 77 58
1847.....	14,169	3,664,425	857,331	4,521,656	319 12	13,995 90
1848.....	16,889	4,995,440	853,704	5,849,170	346 96	18,159 01
1849.....	20,092	4,998,266	1,202,174	6,200,440	314 66	22,051 54
1849.....	23,047	5,181,635	1,495,047	6,676,684	246 81	20,045 09
1850.....	29,968	5,625,965	1,554,284	7,220,249	240 97	26,370 87
1853.....	59,180	12,180,677	3,711,154	16,841,833	284 82	135,662 48
1855.....	80,000	21,637,500	5,355,593	26,992,693	337 41	206,209 03
1856.....	84,113	25,692,308	5,642,776	31,736,084	377 30	296,652 39
1860.....	109,260	21,198,155	5,855,377	27,053,513	249 13	273,315 29
1862.....	128,186	21,580,545	5,552,800	27,139,845	263 79	564,088 06
1864.....	169,353	27,148,023	11,584,769	43,732,792	297 75	974,655 64
1865.....	178,492	44,064,499	20,644,678	64,709,177	362 55	1,294,188 54
1866.....	200,418	66,426,116	19,458,134	85,953,260	428 57	1,719,064 00

That Chicago has been gradually growing wealthier, and year by year more able to bear taxation, the above table fully illustrates. In 1850 the valuation was \$240 97, and the taxes 84 cents per capita, or 35 cents on each \$100. By 1860 the valuation had increased to \$349 13, and the taxes 84 cents per capita, or \$1 01 on each \$100. The first years of the late war materially affected the value of property, but in 1864 a reaction was evidenced which continued upward through the next two years, bringing the per capita valuation from \$268 79, as it was in 1862 to \$287 75 in 1864, \$362 55 in 1865, and \$428,67 in 1866. The rate of taxation in 1864, '65 and '66 was \$2 on the \$100, but owing to the movement in population and property, the tax averaged in 1864 \$5 75; in 1865, \$7 25; and in 1866, \$8 57 per capita. The taxes here spoken of are municipal or city taxes purely. The State taxes for 1866 amounted to \$1 28 per capita, and the county taxes (though we have no means at hand to certify our estimate) may be stated at a like rate. These added to the city taxes, will make a total of taxation levied for domestic purposes on the people of Chicago of \$11.13 per capita. And as a matter of course the people bear their share of Federal taxation and customs. In the 1st district of Illinois, which covers Cook County, in which Chicago is loca

ted, there was collected on account of internal revenue for the year 1865-66, the sum of \$6,672,286, from the following sources :

Manufactures and productions.....	\$3,302,168	Licenses.....	\$615,108
Slaughtered animals.....	69,243	Income.....	1,730,790
Gross receipts.....	847,523	Legacies and successions.....	7,180
Sales.....	11,301	Passports, &c.....	295
Articles in schedule A.....	16,668	Penalties, &c.....	71,849

The population of the county in that year may be estimated at 220,000 persons, and hence the federal taxes averaged about \$33 to each inhabitant.

The customs collected in the United States in the same year amounted to \$179,000,000 in gold. The population of the United States in that year was not far from 35,000,000. This gives about \$5 per capita. All these taxes added, viz.: domestic \$11 13, United States internal \$33, and United States customs \$5—make a total of \$49 13 per capita paid by the people of Chicago. Omitting customs, the internal taxes paid are about \$44 per capita.

COMMERCIAL LAW.—No. 34.

FIRE INSURANCE (CONTINUED).

(Continued from page 472, vol. 56.)

OF THE RISK INCURRED BY THE INSURERS.

At the time of the insurance, the property must be in existence, and not on fire, and not at that moment exposed to a dangerous fire in the immediate neighborhood; because the insurance assumes that no unusual risk exists at that time.

The risk taken is that of fire. And therefore the insurers are not chargeable if the property be destroyed or injured by the indirect effect of excessive heat; or by any effect which stops short of ignition or combustion. But if there be actual ignition, the insurers are liable for the immediate consequences; as the injury from water used to extinguish the fire. Or injury to or loss of goods caused by their removal from immediate danger of fire, even if it be reasonable, and not if the loss or injury might have been avoided by even so much care as is usually given in times of so much excitement and confusion.

In some instances the policies require that the insured should use all possible diligence to preserve their goods; and such a clause would strengthen the claim for injury caused by an endeavor to save them by removal. So the insurers are liable for injury or loss sustained by the blowing up of buildings to arrest the progress of a fire. But we should say, that if goods were damaged by water thrown on to extinguish a supposed fire when there was none in fact, or by the wholly unnecessary and useless destruction of a house distant from the fire, the insurers should not be held.

It must now be conceded to modern science, that lightning is not fire; and if property be destroyed by lightning, the insurers are not liable, un-

loss there was also ignition ; or unless the policy expressly insures against lightning.

An explosion caused by gunpowder is a loss by fire ; not so, it is said, is an explosion caused by steam. Scientifically, it might be difficult to draw a wide distinction between these cases ; but the difference seems to be sufficient for the law.

Whether when the negligence of the insured or his servants is to be considered as the sole or direct cause of the fire or loss, the insurers can be held, has been somewhat considered. And as this is the most common and universal danger, and the very one which induces most persons to insure, there has been some disposition to say that no measure or kind of mere negligence can operate as a defence. And in effect this is almost the law. But if the loss be caused by negligence of the insured himself, of so extreme and gross a character that it is hardly possible to avoid the conclusion of fraud, the defence might be a good one, although there were no direct proof of fraud. That the fire was caused by the insanity of the insured should be no defence.

In Beaumont's work on Fire and Life Insurance in England, he gives some instances drawn from the practice of English insurance companies, a part of which, at least, rest upon sound principles, and illustrate what is probably the law, although not yet determined by adjudication. Thus, if implements or apparatus used for fire, as ranges, grates, or the like, are destroyed by fire, this loss gives no claim on the insurers. But if the chimney or other parts of the house in which the apparatus is set are injured by the same fire, for this the insurers are liable. He says, also, that where the loss is caused only by an excess of the heat or fire which was designedly used, they are not liable. But we should have some doubt as to this rule ; especially as applied to clothes hung up to dry, and catching fire from the flame, and the like. Nor are we satisfied that, if a haymow takes fire by its own fermentation, it is not a loss within the policy. If quicklime be so heated by water as to set on fire the barrels or other wood near it, it may be said that the lime itself is not burnt, and might not be hurt by being burnt, and, if destroyed by water, is not a loss within the policy ; but we do not think this would be reasonable. And if lime be put in a building, and, by being partially wet and heated, set fire to it, and for the purpose of extinguishing this fire, water is so used as to slack the lime and render it valueless, it would be a loss within the policy, unless we say that no loss gives a claim if the thing destroyed contribute to the loss, proximately or remotely. We are aware of no such rule. Thus, if cotton, by fermentation, ignited and set fire to a mill, undoubtedly the loss of the mill would be within the policy, and so would be the loss of other and disconnected cotton. And perhaps we might say that the loss of the very cotton of which the spontaneous combustion caused the fire should be within the policy.

There are various exceptions in the policies used in this country ; but they have not given rise to much adjudication, and do not generally need explanation. It may be remarked, that the exception of "military or usurped power," or any similar phrase, would not be extended so as to cover a common mob. But if the word "riot" be used, insurers are not liable for a fire caused by a tumultuous assemblage, whatever may have been the original purpose of the meeting.

If the insured be charged with burning the property insured himself, it has been held in England, that this defence could be supported only by evidence which would suffice to convict the plaintiff, if tried upon an indictment. But in this country it has been ruled otherwise.

OF VALUATION.

Valuation, precisely as it is understood in a marine policy, seldom enters into a fire policy—never, perhaps, in a policy made by any of those mutual companies, who now do a very large part of the insurance of this country. And quite seldom is a building valued when insured by a stock company. If a loss happens, whether it be total or partial, the insurers are bound to pay only so much of the sum insured as will indemnify the assured. But as care is always taken—and sometimes required by law—not to insure upon any house its whole value, it seldom happens, and if the proper previous precautions are taken, should never happen, that any question of value arises in a case of total destruction of a building by fire.

But mutual companies are usually forbidden by their charter to insure more than a certain proportion of the value of a building; and this requires a valuation in the policy, which is conclusive, for some purposes, against both parties. Of course the insurers can never be held to pay more than the sum insured. And if their charter or by-laws permit a company to insure only a certain proportion of the value, as three fourths—on the one hand, if the company insure more than that proportion, as \$3,500 on property valued at \$4,000, they are held to pay only \$3,000, and the assured cannot show that the building was really worth more than \$4,000; and, on the other hand, the valuation, if not fraudulent, is conclusive against the insurers if the building is destroyed, and they cannot show, in defence, that the building was worth less.

We know nothing to prevent the parties from making a valued policy, if they see fit to do so, although this has been questioned. It is not uncommon for companies who insure chattels, as plate, pictures, statuary, books, or the like, to agree on what shall be the value in case of loss.

Sometimes the policy reserves to the insurers the right to have the valuation made anew by evidence, in case of loss. Then if a jury find a less valuation, the insurers pay the same proportion of the new value which they had insured of the new valuation.

The value which the insurers on goods must pay, is their value at the time of the loss. And it has been held, that a fair sale at auction, with due precaution, will be taken to settle that value after the fire, provided the insurers have reasonable notice or knowledge that the auction is to take place.

The valuation determines the amount which the insurers must pay only in case of total destruction. If the building is only injured by fire, the insurers may either repair it, or pay the cost of repairing it.

OF ALIENATION.

Policies against fire are personal contracts between the insured and the insurers, and do not pass to any other party without the express consent of the insurers.

It is essential to the validity and efficacy of this contract that the insured have an interest in the property when he is insured, and also when the loss takes place; for otherwise it is not his loss, and he can have no claim for indemnity. If, therefore, he alienates the whole of his interest in the property before the loss, he has no claim; and if he alienates a part, retaining a partial interest, he has only a partial and proportionate claim.

After a loss has occurred, the right of the insured to indemnity is vested and fixed; and this right may be assigned for value, so as to give an equitable claim to the assignee, without the consent of the insurers. But we should not consider a mere assignment or conveyance of the premises as of itself an assignment of the right to recover on a policy of insurance for a previous loss, unless something in the contract, either of word or fact, showed clearly that this was intended by the parties.

Policies against fire contain a provision, that an assignment of the property, or of the policy, shall avoid the policy. So, generally, it is hardly worth while to inquire what right an assignee, without consent, would acquire at common law, or in equity, where there is no such provision. We think, however, that the weight of authority is strongly, though not conclusively, against his acquiring any claim. There seems to be some difference between fire policies and marine policies on this subject, the necessity of consent being held more strongly in the case of fire policies; but it is not easy to see a very good reason for this difference.

Nothing is properly an alienation of the property, which is less than an absolute conveyance of the title thereto. It has been held, that a sale by one joint owner of his interest in the property to the other, does not avoid the policy. But the weight of authority is, that generally such sale avoids the policy. An assignment by one partner of his interest in the partnership property to the other, is held to prevent a recovery in case of loss. But a dissolution of the partnership before loss, and a division of the goods, so that each partner owned distinct portions, was held to be in violation of a condition against "any transfer or change of title in the property insured."

Where an insured conveyed half the premises in fee, taking back a lease of the same for five years at a nominal rent, and agreeing to keep and leave the premises in repair, it was held to be an alienation, although the insured would have been bound, as lessee, to rebuild. Where the insured mortgaged the premises and assigned the policy to the mortgagee, with the consent of the insurer, and afterwards conveyed the premises away, it was held that the policy remained valid as to the mortgagee, and for the amount of the debt, on the ground that the insured could do nothing to affect the rights of the assignee without his consent. In this case it was also held, that payment of an assessment after the property is burned does not remove the effect of an alienation.

A conveyance by one insured intended to secure a debt, will be treated in a court of equity as a mortgage, and therefore it does not terminate the interest of the insured. A contract to convey is not an alienation. Nor is a conditional sale, where the condition must precede the sale, and is not yet performed. Nor is a mortgage, not even after breach, and perhaps entry for a breach, and not until foreclosure. Nor selling and immediately taking back. But bankruptcy is said to be an alienation; and if there were a voluntary assignment by one insured to his assignee in trust,

it should operate so, as much as a direct transfer to creditors. There are reasons, however, for drawing a distinction between such a case, and one where the law takes possession of property insured for creditors; at least, we should say that, in such case, the insurance might remain valid until the assignees or commissioners sold the property. If several estates are insured in one policy, and one or more are aliened (or conveyed away), the policy is void as to those only which are aliened. If many owners are insured in one policy, a transfer by one or more to strangers, without the act or concurrence of the other owners, will avoid the policy for only so much as is thus transferred.

Policies of insurance are not negotiable—that is, not assignable in such way as to give to the assignee a right of action in his own name—in most of our States. But the moral or equitable interest of the transferee will sustain a promise by the insurers to him, and if such express promise be made, on this he may bring his action. If he brings it in the name of the assignor, it must, generally at least, be subject to all the defences which the insurers could make against the assignor. It is possible that there should be some qualification of this rule. Undoubtedly, no insured party can make a transfer which shall operate injuriously on the insurers, and yet preserve the rights so transferred. On the other hand, if he, by the terms of the policy, may transfer it with the consent of the insurers, and after such transfer and consent the originally insured fraudulently burns the building, there would be strong reasons for holding the insurance still valid, in favor of the innocent transferee. Perhaps the question would turn upon this: Did the transferee pay, or assume the obligation of paying, or guarantee the payment, of any premiums? If so, he should be held insured, although the terms of the policy and transfer might oblige him to bring his action in the name of the incendiary. Where possible, such transfer, with such consent, would undoubtedly be regarded by the courts as a new and independent contract with the transferee.

An alienation, or even actual surrender of the policy, does not avoid the premium note, or the obligation of the insured to pay his share of the previous losses. If, therefore, after an alienation, the insurers, with full knowledge of it, demand and receive from the insured payments on such account, it is no waiver of the forfeiture of the policy caused by the alienation. From some cases it would seem that, if the insurers called for and received payments accruing subsequently, it would not revive their obligation, on the ground that the policy is so completely annulled by the alienation, that it cannot be revived by any waiver. But we should have much doubt of this. If the insurers expressly waived the forfeiture, it would make them responsible to the transferee.

In practice, care should be taken to have all such transfers regularly made and notified, and the consent obtained fully authorized, and duly indorsed or certified, and all the rules or usages of the insurers in this respect complied with.

Where one insured against fire recovered of his insurers for a loss caused by a railroad company for which the railroad company was liable to the insured, it was held that this operated as an equitable assignment to the insurers of the claims of the insured against the railroad company; and the insurers might enforce this by a suit in the name of the insured.

OF NOTICE AND PROOF.

Where the policy requires a certificate of the loss, the production of it is a condition precedent to any claim for payment. And it must be such a certificate as is required; but a substantial compliance with its requirements is sufficient. So, too, if the notice is to be given forthwith, there must be no unreasonable or unnecessary delay. And all the circumstances of the case are considered, in determining whether there was or was not due diligence. A notice of a loss, which was required by the policy to be given "forthwith," and was in fact given thirty-eight days after a loss, has been held insufficient. But circumstances may justify a longer delay. Where a certificate is required to be furnished "as soon as possible," it is still sufficient if it be furnished within a reasonable time. But where the fire took place in November, and the account of loss was not furnished till the March following, it was held not to be a compliance with the conditions. Generally, this is a question for the jury.

In fire policies, as the premises may be supposed always open to the inspection of the agents of the insurers, a general notice of the fire will probably be enough.

If the assured has assigned the policy with consent, the assignee may give the notice; and if he does, the neglect of the original insured to give notice does not prejudice the assignee.

The insurers may waive their right of notice wholly or partially. And they may do this expressly, or by any acts which fairly indicate to the insured that they accept an imperfect notice given to them, or that they do not need and do not require that any notice should be given, or that they have taken the matter into their own hands, and have made inquiries, and obtained all the information possible. And a refusal "to settle the claim in any way," has been held to supply a good excuse for not offering notice.

The preliminary proofs, by which is meant affidavits, certificates, statements, etc., setting forth the loss and its circumstances, though required by the policy, are not admissible as evidence as to the damages or amount of claim. If it were provided in the policy that they might be so used, this would make them evidence, but we are not aware that this is ever said expressly, and it cannot be inferred from the mere requirement of them.

If the policy provide that the assured shall, if required, submit to an examination under oath, the insurers are not bound by his statement under oath; but if he be duly required, and therefore submit himself to an examination under oath, he cannot afterwards be required to submit to further examination under oath.

OF ADJUSTMENT AND LOSS.

Insurers against fire are not held to pay for loss of profits, gains of business, or other indirect and remote consequences of a loss by fire. We do not know, however, why profits may not be specifically insured against fire, where it is not forbidden by, or inconsistent with, the charter of the insurers.

There is one wide difference between the principle of adjustment of a marine policy and of a fire policy. In the former, if a proportion only of the value is insured, the insured is considered as his own insurer for the residue, and only an equal proportion of the loss is paid. Thus if, on a ship valued at \$10,000, \$5,000 be insured, and there is a loss of one-half, the insurers pay only one-half of the sum they insure, just as if some other insurer had insured the other \$5,000. But in a fire policy, the insurers pay in all cases the whole amount which is lost by fire, provided only that it does not exceed the amount which they insure.

It is said that general average clauses or provisions are inserted in fire policies in England; but they are not known here. Still, in one case, the principle of general average was partially applied. Blankets were used by the insured, with the consent of the insurers, to protect a building from a near fire; they did this effectually, but were themselves made worthless, and an action of the insured against the insurers for this loss was sustained by the court. But the owners of other buildings in the neighborhood, who might have been protected by the use of the blankets, were thought to be too remotely interested to be liable to contribution.

As a contract of fire insurance is an entire one, if the policy ever attaches, there should be no return of premium, although the property be destroyed the day after, and not by fire; as by demolition by whirlwind, or other similar accident. If, however, there were an insurance on goods believed to be at a certain place, at a certain time, and none of them were there, there might be an entire return of premium, because there was never any insurance. But if a part were there, there should be no partial return; because the rule that, where a part only is insured, only a proportionate part is paid by the insurers in case of loss, applies only to marine policies, as stated above.

Most of the fire policies used in this country give the insurers the right of rebuilding or repairing premises destroyed or injured by fire, instead of paying the amount of the loss. If, under this power, the insurers rebuild the house insured, at a less cost than the amount they insure, this does not exhaust their liability; they are now insurers of the new building for the difference between its cost and the amount they have insured. And if the new building burns down, or is injured while the policy continues, the insurer may claim so much as, added to the cost already incurred, shall equal the sum for which he was insured.

It may be important to add that, under our common mutual policies, the insured will also be liable for assessments for losses after the destruction of the building by fire, during the whole term of the policy.

There is no rule in fire insurance similar to that which makes a deduction, in marine insurance, of one-third, new for old. Still the jury, to whom the whole question of damages is given, are to inquire into the greater value of a proposed new building, or of a repaired building, and assess only such damages as shall give the insured complete indemnity.

Where insurers had reserved a right to replace articles destroyed, and the insured refused to permit them to examine and inventory the goods that they might judge what it was expedient for them to do, Chancellor Walworth refused to aid the insurers in a court of equity; but such con-

duct on the part of the insured would be evidence to the jury of great weight to prove an overstatement of loss.

If, after the adjustment and payment, there appears to have been fraud in the original contract, or in the adjustment, or material mistake of fact, it would seem that money paid may be recovered back; but not so if the mistake be of law.

If the policy contains a provision that any fraud in the claim, or any false swearing or affirmation in support of it, shall avoid the policy (as is frequently the case in England), it would seem that it would be left to the jury to say whether there was any material and substantial fraud connected with the matter, and if so, to find for the insurers.

From the present state of the authorities, it may be stated, as a general rule, that the law allows no claim upon the proceeds of policies of fire insurance in favor of any third parties, unless there be a bargain or contract, or a trust, to that effect. Thus, a tenant cannot compel his landlord to expend money received from an insurance office, on the demised premises being burnt down, for rebuilding them, nor prevent the landlord from suing for the rent until the premises are rebuilt, if, by the terms of the lease rent is due although the building is burned.

(To be Continued.)

TOLEDO, WABASH AND WESTERN RAILROAD.

The Toledo, Wabash and Western Railway Company is a consolidation of the Toledo and Wabash, the Great Western of 1859, the Quincy and Toledo, and the Illinois and Southern Iowa Companies—these organizations being merged into one by articles of consolidation duly ratified and confirmed July 1, 1865. In pursuance of this consolidation the present company is now operating a great, direct through line of railway, commencing at Toledo, Ohio, and terminating at Quincy, Ill., and Keokuk, Iowa, with a branch running to Naples, on the Illinois River, making the entire length of road (including 22 miles [leased] of the Chicago, Burlington and Quincy Railroad) about 520.6 miles. Of the main line 75.5 miles are in Ohio, 166.9 miles in Indiana, and 211 miles in Illinois. The Keokuk Branch has a length of 41.2 miles, and the Naples Branch a length of 4.0 miles. Total length owned by the company 498.6 miles. The share capital of the company now amounts to \$6,700,000, as follows:

General stock—57,000 shares.....	\$5,700,000
Preferred stock—10,000 shares.....	1,000,000

Total share capital \$6,700,000

Below we give a statement of the funded debt of the consolidated company, showing a total of \$13,300,000:

	Bonds.	Interest.	Due.	
7 p. c. 1st mort.,	(Tol. & Ill. RR., 75.5 m.).....	Feb. & Aug. 1864.....	\$900,000	
7 do	(L.E. W. & St. L. RR., 166.9 m.)..	do 1860.....	2,600,000	
7 do	(St. W. RR., E. Div., 61.0 m.)..	do 1865.....	45,000	
10 do	(do W. Div., 100.0 m.).....	Apr. & Oct. 1863.....	1,000,000	
7 do	(St. W. RR. of '69, 181.0 m.)..	Feb. & Aug. 1869.....	1,455,000	
7 do	(Q. & Tol. RR., 34.0 m.).....	do 1860.....	500,000	
7 do	(Ill. & So. Iowa RR., 41.3 m.)..	do 1863.....	800,000	
7 p. c. 2d mort.,	(Tol. & W. RR., 75.5 m.).....	May & Nov. 1873.....	1,000,000	
7 do	(Wab. & W. RR., 166.9 m.)...	do 1873.....	1,500,000	
7 do	(St. W. RR. of '69, 181.0 m.)..	do 1863.....	2,500,000	
7 p. c. Equip'm't.	(Tol. & W. Rwy., 242.4 m.)...	Apr. & Oct. 1863.....	600,000	
7 p. c. 3d fund.	(T., Wa. & W. Rwy., 498.6 m.)..	do 1871.....	1,000,000	

Total funded debt on 498.6 miles of road..... \$13,300,000

With the exception of \$1,000,000, the bonds named in the above list cover only sections of the present road; and it being deemed for the interest of all parties that these various classes issued by and bearing the titles of the several corporations now represented by this company, shall be consolidated into one and the same mortgage debt, the Board of Directors have decided to create and issue its coupon bonds, entitled "Consolidated Mortgage Sinking Fund Convertible Bonds," of sufficient amount and for the purpose of retiring all of these outstanding securities. To secure the payment of the principal and interest it is proposed that a mortgage shall be executed, covering the entire real and personal property of the company from Toledo to the Mississippi, to constitute the first mortgage lien upon the consolidated property of the Company. For the purpose of giving these consolidated bonds a special advantage and value, the mortgage securing them will not only embrace the entire amount of property pledged for the old bonds, but a large and valuable amount heretofore entirely free and unincumbered, besides original liens upon important contracts, accessions and franchises more recently acquired. The time and conditions for the exchange of these bonds will soon be made known.

The gross earnings of the road for the half fiscal year ending December 31, 1865, and for the full year 1866, together with the operating expenses during the two periods, are presented in the annexed statement, viz.:

	July to Dec. 1865	Jan. to Dec. 1866
Passenger transportation.....	\$896,923 08	\$1,322,848 78
Freight	1,080,358 88	2,209,427 35
Mail	20,000 00	55,000 00
Express	49,048 10	96,245 17
Miscellaneous	40,846 59	84,786 92
Gross earnings.....	\$2,083,109 15	\$2,717,386 22
Roadway—renewals.....	\$109,017 20	\$341,051 79
“—maintenance.....	338,084 06	694,066 25
Cars, engines, &c.—maint'ce.....	276,887 12	556,805 78
General exp'n's transp't'n &c.....	768,563 98	1,487,423 26
Residual income.....	\$245,670 98	\$906,199 72

The revenues of the company have been very seriously impaired in consequence of the disasters to the wheat crop during the past two years throughout the entire extent of country traversed by the road. In evidence of the nature and extent of this loss, it may be stated that the falling off in the tonnage of wheat and flour during the 18 months covering the company's report, as compared with the same period of previous years, is equal to 1,500,000 bushels, the earnings upon which would have been \$660,000. It is to this unlooked for misfortune the directors attribute their inability to declare satisfactory dividends on capital. The increase in each and all other branches of traffic upon the road as compared with previous years has been marked and encouraging. The coal and lumber business especially indicate a remarkable growth and promise to become the most permanent and productive sources of revenue.

The company have eleven engines houses and 102 stations on the line of their road. The equipment now consists of 102 locomotives, 47 passenger cars, 1,040 box freight cars, 27 mail and baggage cars, 275 stock cars, 200 platform cars, and 150 coal cars. The whole number of passengers carried in the six months of 1865 was 366,525, and in the year 1866,

624,378. The amount of freight carried in the two periods was as follows:

	July-December, 1865.			Jan.-December, 1866.		
	Eastw'd.	Westw'd.	Total.	Eastw'd.	Westw'd.	Total.
Grain.....bushels	1,070,198	144,693	1,214,891	8,910,771	894,718	4,304,984
Cattle.....cars	3,000	75	3,075	7,245	189	7,434
Hogs.....cars	999	148	1,147	2,973	893	3,870
Lumber.....1,000 feet	2,969	16,535	19,504	4,615	23,501	28,116
Sundries.....tons	47,637	79,214	126,851	120,284	141,073	261,357
Freight earnings.....	\$529,075	\$491,121	\$1,020,196	\$1,299,124	\$910,308	\$2,209,432

The Income account, showing the residuary balances for the eighteen months since consolidation and other receipts as per Treasurer's books, and the disbursements on account of renewals, construction, equipment &c., charged thereon, supplies the following summary:

DEBITOR.		CREDITOR.	
Locomotives, cars, tools, &c.....	\$297,541 10	Balance Dec. 31, 1865.....	\$545,670 89
Construction.....	816,433 90	" 1866.....	906,199 72
Interest account.....	1,285,180 87	Supplies from old comp'ies.....	102,548 64
Profit & Loss—Discount, &c.....	201,841 28	Sinking Fund Bonds.....	1,000,000 00
Tol. Wab. & Western R. Co.....	17,016 63		
Ill. & So. Iowa, R.R. Co.....	129,807 07	Surplus Income.....	\$1,554,419 5
Total.....	\$2,230,890 25	Total.....	\$2,230,890 25

The Treasurer's General Balance Sheet of December 31, 1866, reads as follows:

DEBITOR.		CREDITOR.	
Railway & equipment.....	\$19,830,000 00	Capital Stock.....	\$6,700,000 00
Trustees.....	1,195,000 00	Funded Debt.....	13,800,000 00
Materials & fuel on hand.....	303,014 07	Coupons of 1865 & 1866.....	42,394 75
U. S. Post office, &c.....	80,809 81	Balance of Income acc't.....	278,599 00
Wabash Elevator Stock.....	10,000 00	Cash and Bank account.....	71,790 53
Sundries.....	24,778 82	Treasurer's Equalization account.....	685,728 19
Equalization account.....	700,300 24	Bills payable.....	15,500 00
Total.....	\$22,113,900 47	Total.....	\$22,113,900 47

The general account current (covering the whole period since the consolidation) shows the amount of money received from all sources, and what disposition was made of the same, as follows:

RECEIPTS.		DISBURSEMENTS.	
Net earnings (6 mos.) 1865.....	\$545,670 89	Equipment.....	\$297,541 10
do (12 mos.) 1866.....	906,199 72	Construction.....	816,433 90
Sinking fund, bonds issued.....	1,000,000 00	Interest on bonds, &c.....	1,285,180 87
'rears. on equalizat'n acc't.....	685,728 19	Ill. & Southern Iowa R.R.....	129,807 07
Bills payable.....	15,500 00	Discount on bonds, &c.....	201,841 28
Bank acc't (overdrafts).....	\$71,790 53	Equalization account.....	700,300 24
Less dues from U. S.,		Advanced for wood and supplies.....	200,465 43
&c.....	55,536 13—	Toledo & Wabash R.R. Co.....	17,016 63
Total.....	\$2,149,301 20	Wabash Elevator stock.....	10,000 00
		Total.....	\$2,149,301 20

It will be seen from this statement that the company, after promptly paying the interest upon each and every class of its funded obligations, including the dividends upon its preferred stock, closes with the year in a sound financial condition, and without any floating debt or outstanding liability whatever.

The monthly range of prices at which the stocks of the consolidated com-

panies sold at New York in the year 1866 are given in the following statement:

	General.	Preferred.		General.	Preferred.
January	42 @ 48	.....@.....	July.....	35 @ 40	61 @ 61
February	81 @ 40	.....@.....	August.....	30 @ 41½	67½ @ 70
March	81½ @ 33	.....@.....	September.....	43½ @ 40½	71 @ 73½
April	82 @ 30	68 @ 38	October.....	44 @ 45	73 @ 75
May.....	83½ @ 37½	.....@.....	November.....	40 @ 54½	73 @ 75½
June.....	85 @ 36	.....@.....	December.....	40½ @ 45½@.....

—range during the year—general 31@55, and preferred 61@75½. On the 1st of June current the closing quotations were—general 41½, and preferred 62.

RAILWAY EXTENSION AND ITS RESULTS.

BY R. DUDLEY BAXTER, M.A.*

I.—INTRODUCTION.

If a Roman emperor, in the most prosperous age of the empire, had commanded a history to be written of that wonderful system of roads which consolidated the Roman power, and carried her laws and customs to the boundaries of the accessible world, it would have afforded a just subject for national pride. The invention and perfecting of the art of road making, its sagacious adoption by the State, its engineering triumphs, its splendid roads through Italy, through Gaul, through Spain, through Britain, through Germany, through Macedonia, through Asia Minor, through the chief Islands of the Mediterranean, and through Northern Africa; all these would have been recounted as proofs of Roman energy and magnificence, and as introducing a new instrument of civilization, and creating a new epoch in the history of mankind.

A similar triumph may fairly be claimed by Great Britain. The Romans were the great Road-makers of the ancient world—the English are the great Railroad-makers of the modern world. The tramway was an English invention, the locomotive was the production of English genius, and the first railways were constructed and carried to success in England. We have covered with railroads the fairest districts of the United Kingdom, and developed railways in our colonies of Canada and India. But we have done much more than this, we have introduced them into almost every civilized country. Belgian railways were planned by George Stephenson. The great French system received an important impulse from Locke. In Holland, in Italy, in Spain, in Portugal, in Norway, in Denmark, in Russia, in Egypt, in Turkey, in Asia Minor, in Algeria, in the West Indies, and in South America Englishmen have led the way in railway enterprise and construction. To this day, wherever an undertaking of more than ordinary difficulty presents itself, the aid is invoked of English engineers, English contractors, English navvies, and English shareholders; and a large portion of the rails with which the line is laid, and the engines and rolling stock with which it is worked are brought from England.

* Read before the Statistical Society of London November, 1866

To Englishmen the annals of railways must always be of the highest interest, and I trust that the brief inquiry upon which I am about to enter will not be deemed a waste of labor. I propose to examine into the extension of railways at home and abroad; to show the rate at which it is proceeding; the expenditure which it has cost; and its vast commercial results. The practical questions will follow whether the construction of Railways in the United Kingdom has reached its proper limit? Are we over-railroaded, as some assert, so that railways ought to be discouraged? Or are we under-railroaded, so that fresh railways ought to be invited? Are other nations passing us in the race of railway development? And, lastly, can any improvement be introduced into our railway legislation?

II.—RAILWAYS IN THE UNITED KINGDOM.

So far as roads are concerned, the dark ages may be said to have lasted from the evacuation of Britain by the Romans in 448, to the beginning of the last century. During the whole of that period nothing could be more barbarous or impassable than English highways. The Scotch rebellions first drew attention to the necessity of good roads. The first step was to establish turnpikes, with their attendant waggons and stagecoaches; superseding the long strings of packhorses which, up to that time, had been the principal means of transport. The second step was to render navigable the rivers which passed through the chief seats of industry. The third, which commenced later in the century, was to imitate the rivers by canals, and to construct through the north and centre of England a net work of 2,600 miles of water communication, at an outlay of £50,000,000 sterling. But roads and canals combined were insufficient for the trade of Lancashire and Yorkshire, and bitter complaints were made of expense and delay in the transmission of their goods.

The desired improvement came from the mining districts. Since the year 1700 it had been the custom to use wooden rails for the passage of the trucks. About the year 1800 Mr. Outram, in Derbyshire, laid down iron rails upon stone sleepers, and the roads so constructed took from him the name of Outram's Ways or Tramways. About the year 1814, the ingenuity of mining engineers developed the stationary steam-engine into a rude locomotive, capable of drawing heavy loads at the rate of four or five miles an hour. It was proposed to construct a public railway on this principle between Stockton and Darlington. After much delay the line was opened by George Stephenson in 1825, and the experiment was successful as a goods line—unsuccessful, from its slowness, as a passenger line. The next experiment was the Manchester and Liverpool Railway, projected as a goods line to accommodate the increasing trade of those two places, which was crippled by the high rates of the canal and navigation. Before the railway was completed, another great improvement had taken place in the construction of locomotives by the discovery of the multitubular boiler, which immensely increased the volume of steam, and the speed attainable.

The opening of the Manchester and Liverpool Railway on 15th September, 1830, was the formal commencement of the railway era. On that day the public saw for the first time immense trains of carriages loaded,

with passengers, conveyed at a rate of more than fifteen miles an hour, a speed which was largely exceeded in subsequent trials. The desideratum was at length obtained, viz., the conveyance of large masses of passengers and goods with ease and rapidity; and it was seen that the discovery must revolutionize the whole system of inland communication.

The public feeling was strangely excited. Commercial men and men of enterprise were enthusiastic in favor of the new railways and eager for their introduction all over the country. But the vested interests of roads and canals, and landed proprietors who feared that their estates would be injured, together with the great body of the public, were violently prejudiced against them. Railways had to fight their way against the most strenuous opposition. I quote from the "Life of Robert Stephenson," the engineer of the London and Birmingham line:

"In every parish through which Robert Stephenson passed, he was eyed with suspicion by the inhabitants, and not seldom menaced by violence. The aristocracy regarded the irruption as an interference with territorial rights. The humbler classes were not less exasperated, as they feared the railway movement would injure those industrial interests by which they lived. In London, journalists and pamphleteers distributed criticisms which were manifestly absurd, and prophecies which time has signally falsified."—Vol. i, p. 169.

The city of Northampton was so vehement in its opposition, that the line was diverted to a distance of five miles, through the Kilsby Tunnel, to the permanent injury both of the city and railway. The bill was thrown out in Parliament, and only passed in the following session by the most lavish expenditure in buying off opposition.

Other lines were soon obtained in spite of the same vehement hostility. The Grand Junction Railway from Liverpool to Birmingham, was passed in 1833. The Eastern Counties Railway was sanctioned in 1834. It was launched as a 15 per cent. line. It is said that a wealthy banker in the eastern counties made a will, leaving considerable property to trustees to be expended in parliamentary opposition to railways. The Great Western was thrown out in 1834, but passed in 1835. The London and Southampton, now the London and South Western, was proposed in 1832, but was not sanctioned till 1834.

In 1836 came the first railway mania. Up to this time the difficulty had been to pass any bill at all, now competing schemes began to be brought before Parliament. Brighton was fought for by no less than five companies, at the total expenditure of £200,000. The South Eastern obtained its act after a severe contest with the Mid Kent and Central Kent. Twenty-nine bills were passed by Parliament authorising the construction of 994 miles of railway. In the autumn the mania raged with the greatest violence. "There is scarcely," said the Edinburgh Review, "a practicable line between two considerable places, however remote, that has not been occupied by a company; frequently two, three or four rival lines have started simultaneously." The winter brought a crash, and the shares of the best companies became almost unsaleable.

In 1845 most of the great lines had proved a success. The London and Birmingham was paying 10 per cent., the Grand Junction 11 per cent., the Stockton and Darlington 15 per cent., and railway shares were on an average at 100 per cent. premium. The railway mania broke out

with redoubled violence; railways appeared an El Dorado. The number of miles then open was 2,148. The number of miles sanctioned by Parliament in the three following sessions was :

1845.....	2,700
1846.....	4,538
1847.....	1,854
Total	8,592

Had all these lines been constructed, we should have had in 1852 more than 10,700 miles of railway, a number which was not actually reached till 1861, or nine years later. But the collapse in 1846 was so severe that an act was passed for the purpose of facilitating the dissolution of companies, and a large number of lines were abandoned, amounting, it is said, to 2,800 miles.

Railway extension was now menaced with a new danger. The effect of the panic was so great, and the losses on shares so severe, that the confidence of the public was destroyed. Besides this, as the new lines were opened, the dividends gradually decreased till the percentage of profit on capital had gone down from $5\frac{1}{2}$ per cent. in 1845 to $3\frac{1}{2}$ in 1849 and $3\frac{1}{2}$ in 1850, leaving scarcely anything for ordinary shareholders. As a consequence, shareholders' lines were at an end. But since 1846 a new custom had been gaining ground of the amalgamation of smaller into larger companies. I may instance the North Eastern Company, which consists of twenty-five originally independent railways. In this manner eleven powerful companies had been formed, which divided the greater part of England between them. The competition between these companies for the possession of the country was very great, and by amalgamations, leases, guarantees, and preference stocks, they financed a large number of lines which otherwise could not be made. In this manner the construction of railways between 1850 and 1858 progressed at the rate of nearly 400 miles a year.

But towards the end of 1858 the great companies had exhausted their funds and ardor, and proposed terms of peace. The technical phrase was "that the companies required rest." Again it seemed probable that railway extension would be checked. But a new state of things arose. Twenty years of railway construction had brought forward many great contractors, who made a business of financing and carrying through lines which they thought profitable. The system had grown up gradually under the wing of the companies, and it now came to the front, aided by a great improvement in the value of railway property, on which the percentage of profits to capital expended had gradually risen from $3\frac{1}{2}$ per cent. in 1850 to $4\frac{1}{2}$ in 1860. The companies also found it their interest to make quiet extensions when required by the traffic of the country. Thus railway construction was continued in the accelerated ratio of more than 500 miles a year. The following table gives a summary of the rate of progress from 1845 to 1865:—

UNITED KINGDOM—MILES CONSTRUCTED.

Year.	Miles Opened.	Average Number Opened per An.
1834.....about	200	133
1840....."	1,200	240
1845.....	2,440	512
1850.....	6,500	567
1855.....	8,835	425
1860.....	10,424	571
1865.....	12,289	

During the same year the percentage of profits to capital expended were as follows:—

	Per cent.		Per cent.
1845.....	5.48	1860.....	4.89
1850.....	3.31	1865.....	4.46
1855.....	2.90		

The latter table, which is abridged from an annual statement in *Herschel's Journal*, scarcely gives an idea of the gradual manner in which the dividends sank from their highest point in 1845 to their lowest in 1850, and of their equally gradual recovery from 1850 to 1860 and 1865. The main results of the two tables are, first, the close connection between the profit of one period and the average number of miles constructed in the next five years, and, second, the fact that the construction of railways in the United Kingdom has been steadily increasing since 1855, and is now more than 500 miles per annum.

The number of miles authorized by Parliament during the last six years is stated in the *Railway Times* to be as follows:—

Year.	Miles.	Year.	Miles.
1861.....	1,329	1864.....	1,329
1862.....	809	1865.....	1,996
1863.....	795	1866.....	1,663
			7,323
Average.....			1,220

Hence the miles authorized by Parliament for the last six years have been double the number constructed; and there must be about 3,500 miles not begun or not completed—a number sufficient to occupy us for fully seven years, at our present rate of construction.

Such is a brief summary of the history of railway extension in Great Britain and Ireland. It may be thrown into five periods:—

1. The period of experiment, from 1820 to 1830.
2. The period of infancy, from 1830 to 1845.
3. The period of mania, from 1845 to 1848.
4. The period of competition by great companies, from 1848 to 1859.
5. The period of contractor's lines and companies' extensions, from 1859 to 1865.

III.—DISTRIBUTION OF RAILWAYS IN THE UNITED KINGDOM.

The returns of the Board of Trade to the end of 1865 give the following distribution of the 13,289 miles then open:—

	Double Lines.	Single Lines.	Total Miles Open.
England and Wales.....	8,081	3,170	9,251
Scotland.....	946	1,354	2,200
Ireland.....	476	1,362	1,838
	<u>7,503</u>	<u>5,786</u>	<u>13,289</u>

Hence there is a considerable preponderance of double lines over single lines in England, and of single lines over double in Scotland and Ireland.

The following table shows which country has the greatest length of railways in proportion to its area:—

	Area in Square Miles.	Railway Mileage.	Square Miles per Mile of Railway.
England and Wales.....	57,812	9,251	6.25
Scotland.....	30,715	2,200	14.
Ireland.....	32,512	1,838	17.7

So that England and Wales have a mile of railway for every six and a half square miles of country, being the highest proportion in the world, while Scotland has less than half that accommodation, and Ireland little more than one-third.

The following table shows which country has the greatest length of railway in proportion to population:—

	Population in 1860.	Railway Mileage.	Population per Mile of Railway
England and Wales.....	20,228,497	9,251	2,186
Scotland.....	3,096,808	2,200	1,409
Ireland.....	5,850,309	1,838	3,162

So that Scotland, a thinly inhabited country, has the greatest railway mileage in proportion to her population, and we shall afterwards find that she stands at the head of all European countries in this respect.

The manner in which this railway mileage is distributed through England deserves some attention. A railway map will show that the general direction of English lines is towards the metropolis. London is a centre to which nearly all the main lines converge. Every large town is, in its degree, a centre of railway convergence. For example, look at the lines radiating from Leeds, from Hull, from Birmingham, or from Bristol. But all those lesser stars revolve, so to speak, round the metropolis as a central sun.

A great deal may be learned of the character and political state of a country from the convergence of its railway lines. Centralising France concentrates them all on Paris. Spain, another nation of the Latin race, directs her railways on Madrid. Italy shows her past deficiency of unity, and want of a capital, by her straggling and centreless railroads. Belgium is evidently a collection of co-equal cities without any preponderating focus. Germany betrays her territorial divisions by the multitude of her railway centres. Austria, on the contrary, shows her unity by the

convergence of her lines on Vienna. The United States of America prove their federal independence by the number of their centres of radiation.

The national character of the English nation may be traced in the same way. Though our railways point towards London, they have also another point of convergence—towards Manchester and the great port of Liverpool. The London and North Western, the Great Northern (by the Manchester, Sheffield and Lincolnshire line), the Great Western and the Midland run to Manchester and Liverpool from the south. The Manchester, Sheffield and Lincolnshire railway, the London and North Western Yorkshire and Carlisle lines, and the network of the Lancashire and Yorkshire Company converge on them from the east and north. The London and North Western Welsh railways and the Mid Wales and South Wales lines communicate with them from the west. Thus our railway system shows that Manchester and Liverpool are the manufacturing and commercial capitals of the country, as London is its monetary and political metropolis, and that the French centralization into a single great city does not exist in England.

It remains to describe the great systems into which the English railways have been amalgamated. There are in England twelve great companies, with more than £14,000,000 each of capital, which in the aggregate comprises nearly seven-eighths of our total mileage and capital. They divide the country into twelve railway kingdoms, generally well defined, but sometimes intermingled in the most intricate manner. They may be classified into the following seven districts:—

	Miles Open.	Capital Expended.
1. <i>North Western District</i> —London and North Western Railway.....	1,806	£58,210,000
2. <i>Midland District</i> —Midland Railway.....	677	26,108,000
3. <i>North Eastern District</i> —Great Northern Railway... ..	422	18,200,000
North Eastern Railway	1,121	41,158,000
4. <i>Mercsey to Humber District</i> —Lancashire and Yorkshire Railway.....	408	21,114,000
Manchester, Sheffield and Lincolnshire Railway... ..	246	14,112,000
5. <i>Eastern District</i> —Great Eastern Railway.....	709	28,574,000
6. <i>South Eastern District</i> —South Eastern Railway... ..	819	18,626,000
London, Chatham and Dover Railway.....	175	14,768,000
London and Brighton Railway.....	294	14,561,000
7. <i>South Western District</i> —London and South Western Railway.....	500	16,364,000
Great Western Railway.....	1,292	47,680,000
Total.....	7,564	£309,431,000

In Scotland there are three great companies:—

	Miles Open.	Capital Expended.
1. <i>South East Coast</i> —North British Railway.....	783	£17,802,000
2. <i>Central District</i> —Caledonian Railway.....	561	14,797,000
3. <i>South West Coast</i> —Glasgow and South Western....	249	5,603,000
Total.....	1,543	£38,202,000

which include three-fourths of the whole mileage and capital of Scotch railways.

In Ireland there are only two large companies :—

	Miles Open.	Capital Expended.
1. <i>South Western District</i> —Great Southern and Western	420	£5,712,000
2. <i>Midland District</i> —Midland Great Western.....	260	8,625,000
Total.....	680	£9,337,000

which embrace rather more than two-fifths of the capital and mileage.

The above figures are taken from *Herepath's Railway Journal*, made up very nearly to the present time.

The following table shows the average gross receipts and net profits, for three years, for the United Kingdom, and also the dividends paid on ordinary stock in the above great companies, except the London, Chatham and Dover :—

AVERAGE RECEIPTS AND DIVIDENDS PER CENT.			
	1857.	1861.	1865.
Gross receipts.....	7.87	8.27	8.57
Net profits.....	4.19	4.30	4.46
<i>Dividends of Great Companies :</i>			
12 English.....	4.00	4.45	4.55
3 Scotch.....	4.55	4.90	5.70
2 Irish.....	5.00	5.00	5.56
Average dividends....	4.51	4.78	4.64

IV.—COST OF RAILWAYS IN THE UNITED KINGDOM.

The total capital authorized and expended, up to the end of 1865, is given in the Board of Trade Returns, as follows, including the companies estimated for who have not made a return.

CAPITAL AUTHORIZED.	
Shares.....	£484,457,000
Loans.....	148,968,000
Total.....	£578,425,000

CAPITAL EXPENDED.	
<i>Debenture Capital :</i>	
Stock.....	£18,812,000
Mortgages.....	98,059,000—111,871,000
Preference capital.....	124,517,000
Ordinary capital.....	220,038,000
	£456,421,000

Hence the following conclusions :—

1. The capital expended is more than half as large as the national debt.

2. The debenture and preference capital, which are practically first and second mortgages of railway property, amounted in 1865 to more than half the whole capital expended.

So that railway property is virtually mortgaged to the debenture and preference capitalist for about half its value.

THE MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

JULY, 1867.

CENSUS OF RHODE ISLAND, 1865.*

By the settlement of the boundary question with Massachusetts in 1862, the profit and loss to Rhode Island in territory and population was as follows :

In Pawtucket, Rhode Island gained.....	6,939 miles and 4,900 inhabitants.
In East Providence ".....	19.5 " " 1,700 "
Total gain.....	19.4 miles and 5,900 inhabitants.
In Fall River, Rhode Island lost.....	1.19 " " 8,877 "
Net gain to Rhode Island.....	8.2 miles and 2,523 inhabitants.

It need scarcely be repeated that Rhode Island, the smallest State in the Union, is only 60 miles long and 35 miles in width, and that a large portion of this width is taken up by the waters of Narragansett Bay, which, extending inland for some 30 miles, divides the state into two unequal parts, leaving a land territory of only 1,054.6 square miles, with a shore washed by tide-water of 350 miles.

1. PERSONAL CENSUS.

The State is divided into five counties, and these contain thirty-three townships, five of which are situated on islands. The smallest town

* Report upon the census of Rhode Island, 1865 ; with statistics of the population, agriculture, fisheries and manufactures of the State prepared under the direction of the Secretary of State, by Edwin M. Snow, M. D. Superintendent of the census. 1 vol. 600 p. 112.

(Warren) has only 4.7 square miles, the largest (South Kingstown) has 77.9 square miles. Below we give a table showing the area and population of the State by towns and counties:

		Square miles.	Pop. square miles.	Pop. square miles.		Square miles.	Pop. square miles.	Pop. square miles.
Barrington,	Bristol Co.	9.8	1,022	110.5	Burrillville,	53.2	4,961	91.4
Bristol,		10.3	4,649	461.8	Cranston,	53.7	9,177	273.3
Warren,		4.7	2,792	594.0	Cumberland,	53.6	5,816	244.5
Coventry,	Kent Co.	58.6	3,995	68.2	East Prov.,	12.5	3,173	178.7
East Greenwich,		17.1	2,400	140.3	Foster,	48.2	1,573	39.4
W. Greenwich,		49.1	1,328	25.0	Glocester,	58.2	2,326	42.9
Warwick,		44.2	7,696	174.1	Johnston,	24.1	5,436	142.5
Jamestown,	Newport County.	9.5	349	36.7	North Providence,	15.0	14,553	968.8
Little Compton,		21.4	1,197	55.9	Pawtucket,	6.9	5,000	724.6
Middletown,		12.5	1,019	81.5	Scituate,	53.3	3,538	67.4
Newport,		7.0	12,688	1812.6	Smithfield,	73.2	12,315	163.0
New Shoreham,	Providence Co.	10.5	1,308	194.5	Charlestown,	39.8	1,184	29.6
Portsmouth,		22.4	2,153	92.0	Exeter,	54.0	1,438	25.9
Tiverton,		31.8	1,978	62.0	Hopkinton,	43.6	2,512	57.6
Providence City,		6.7	54,595	8148.3	North Kingstown,	42.6	3,166	74.2
					South Kingstown,	77.9	4,513	37.9
					Richmond,	38.9	1,880	47.0
					Westerly,	31	3,515	123.4

The area and population by counties is as follows:

Counties.	Area, square miles.	Pop.	Pop. to sq. miles.
Bristol.....	24.3	8,440	348.5
Kent.....	169.0	15,319	90.6
Newport.....	116.1	20,627	178.2
Providence (including city).....	413.8	122,072	295.2
Washington.....	331.9	18,468	55.6
Total of State.....	1,054.6	184,955	175.4

The density of population in Rhode Island (175.4 to the square mile) is higher than in any other of the United States. In 1865 the population of Massachusetts was 1,267,239, which gives 162.4 to the square mile. In the same year New York had 81.5, and New Jersey 92.9, to the square mile; but between these and Massachusetts, Connecticut has about 110 to the square mile, finds its position. The density of population in France is about the same as in Rhode Island. Prussia, Bavaria, Austria, Denmark, Scotland, Sweden and Norway are less densely populated.

The distribution of the population of course varies the density. The cities of Providence and Newport and the six towns, Bristol, Warren, Cranston, Cumberland, North Providence and Pawtucket containing only 117.9 square miles, but a population of 111,670 persons—11 per cent of the area, and 60 per cent. of the population of the State. If we deduct these from the total area and population, we find in the remainder of the State 936.7 square miles, with 73,295 inhabitants, or only 78 persons to each square mile. The seats of manufactures and commerce are denoted by their superior density.

The progress of the State in population is given in the following table:

Census of	Population.	Change.	Census of	Population.	Change.
1708.....	7,161		1800.....	69,123	(10 years) 297
1730.....	17,933	(+22 years) 10,772	1810.....	77,031	(") 7,909
1743.....	22,778	(+18 years) 14,845	1820.....	83,559	(") 6,528
1766.....	40,414	(+7 years) 7,641	1830.....	97,310	(") 14,151
1774.....	59,707	(+19 years) 19,293	1840.....	108,930	(") 11,620
1776.....	55,011	(-2 years) 4,696	1850.....	147,545	(") 38,715
1783.....	53,347	(-6 years) 1,664	1860.....	174,630	(") 27,075
1790.....	68,635	(+6 years) 16,478	1865.....	184,955	(+5 years) 10,325

The movement by counties during the present century has been as follows :

Counties.	1800.	1810.	1820.	1830.	1840.	1850.	1860.	1865.
Fristol.....	3,801	5,073	5,637	5,446	6,476	8,514	8,907	8,469
Kent.....	8,487	9,884	10,228	12,788	13,083	15,063	17,303	15,319
Newport.....	14,845	16,294	15,771	16,535	16,574	20,907	21,596	20,687
Providence.....	35,854	30,899	35,786	47,030	58,273	87,536	107,799	122,012
Washington.....	16,135	14,929	15,687	15,431	14,324	16,430	18,715	18,468

The progress of the cities of Providence and Newport and the six towns before selected has been as follows :

Cities, &c.	1800.	1810.	1820.	1830.	1840.	1850.	1860.	1865.
Providence.....	7,614	10,071	11,767	16,836	23,173	41,513	50,666	54,995
Newport.....	6,789	7,907	7,319	8,010	8,333	9,563	10,598	12,688
Bristol.....	1,673	2,893	3,197	3,034	3,490	4,616	5,271	4,649
Warren.....	1,473	1,775	1,806	1,800	2,497	2,103	2,638	2,792
Cranston.....	1,444	2,161	2,374	2,652	2,901	4,311	7,500	9,177
Cumberland.....	2,056	2,310	2,463	3,075	5,225	6,561	8,239	8,316
North Providence.....	1,087	1,758	2,420	3,503	4,307	7,680	11,818	14,553
Pawtucket*.....	.....	.....	.....	.....	.....	.....	.....	5,000
Total.....	22,371	28,575	31,436	39,510	49,765	77,447	956,738	111,670

The rate of increase from census to census of the whole State and the two chief places, Providence and Newport, is shown in the following series of reductions :

	Whole State.	Cities— Provi- dence.	New- port.		Whole State.	Cities— Provi- dence.	New- port.
1790-1800.....	0.4	19.8	0.3	1830-40.....	12.0	37.6	4.0
1800-10.....	11.4	33.3	17.3	1840-50.....	35.6	79.1	14.8
1810-20.....	7.8	16.8	dec. 7.4	1850-60.....	18.3	22.0	9.9
1820-30.....	17.0	43.1	9.4	1860-65 (5 years)...	5.9	7.8	30.7

The increase in the cities from 1860 to 1865—in Providence 3,929, and in Newport 2,180, or together 6,109. The net increase in the towns above designated (not including Pawtucket) was 3,823. The total increase of the State was 10,345. Hence we find that nearly the whole increase has taken place within a very limited area. The agricultural parts of the State increase very slowly, and frequently retrograde. Washington County in 1790 had 18,075, and in 1865 18,468 inhabitants.

Among the facts deduced from the tabular statements accompanying the report the following are interesting.

There were 28,666 dwelling houses in the State 39,208 families, giving 1.4 families and 6.45 persons to each dwelling, and 4.72 persons to each family. In Providence there were 1.08 families and 8.06 persons to each house. There were 926 empty dwelling houses, of which 120 were in Newport, the census having been taken June 1, before the arrival of Summer visitors. Of the 28,666 dwelling houses in the State, 27,959 were constructed of wood, and only 432 of brick and 275 of stone. Even in Providence only 3.64 per cent. were of brick or stone.

More than one-half the colored population was found in Providence and Newport. The total number in the State was 4,087, being 135 more than in 1860, and forming 3.21 per cent. of the total population.

In regard to sex, there were in the State 8,439 more females than males. The proportion of the sexes were as follows :

White population.....	47:80 males, and 52:20 females in each 100.
Colored ".....	43:37 " 56:13 " "
White and colored.....	47:72 " 52:28 " "

* Belonged to Massachusetts up to 1822.

Generally in New England there is, for obvious reasons, a large excess of females in the population, while in the newer States the opposite is true. In the whole country, in 1860, there was an excess of 730,000 males in a population of 31,000,000.

With regard to the nativity of the population the following facts are deduced. Of the 184,965 inhabitants of the State, 75,055 were born in the towns in which they resided, and 37,152 had migrated from the towns in which they were born to other towns in the State; the number of inhabitants born in the State and still living in it having been 112,207. Inhabitants born in other of the United States numbered 33,055, and those born in foreign countries 39,703. Every town in the State is represented in Providence, and nearly so in Newport. Natives of Newport are living in every other town except Gloucester. There seems, however, to be no special law governing migration within the State, except the tendency of the population of the smaller towns and farming districts to cities and manufacturing towns.

Every State in the Union, except Oregon, was represented in the population of 1865. The following compares the American born within Rhode Island in 1860 and 1865:

Natives of—	1860.	1865.	Natives of—	1860.	1865.
Maine	1,831	1,810	Connecticut	4,634	5,439
New Hampshire	2,488	1,063			
Vermont	692	748	Natives of New England.	133,089	138,106
Massachusetts	13,965	17,330	" of other States..	5,187	7,156
Rhode Island	109,965	112,997			
Total native born				137,266	145,262

The large increase of natives of Massachusetts in 1865 was partly owing to the annexation of Pawtucket and East Providence in 1862.

The foreign population of 1865 represented thirty different countries, and numbered 39,703 persons, making 21.46 per cent. of the total population. The proportion in 1850 was 15.66, and in 1860 21.41 per cent. The following shows the number of foreigners in the State in 1850, 1860 and 1865:

Natives of—	1850.	1860.	1865.	Natives of—	1850.	1860.	1865.
Ireland	15,944	25,365	27,080	Germany	220	815	1,917
England	4,400	6,356	6,473	France	80	123	146
Scotland & Wales	1,040	1,586	1,408	Portugal	68	64	75
British America	1,084	2,630	3,384	Other countries...	2-5	263	290
Total					22,111	37,394	59,703

In the city of Providence the number of foreigners has increased but little for the last fifteen years, while the per centage has decreased. The Providence enumerations show the following:

Census.	Total populat'n.	For- eign.	p. cent.	Census.	Total populat'n.	For- eign.	p. cent.
1845 (city)	31,747	6,965	18.79	1850 (United States)	50,666	12,570	24.80
1850 (United States)	41,513	10,275	24.75	1855 (State)	54,595	13,473	24.54
1865 (city)	47,718	13,263	27.69				
Increase in twenty years					23,648	7,457	32.53

The Irish population comprised, in 1850, 68.99; in 1860, 67.61, and in 1865, 68.08 per cent. of the foreign born population of the city.

Taking the whole State together, we find that of the 145,262 classed as American born, 27,946 were the offspring of foreign parents. There is

also included among the native born 3,558 persons of mixed parentage, of which 1,759 had foreign-born mothers and 1,799 foreign-born fathers.

In every 100 persons there are 10.20 under 5 years of age; 10.91 between 5 and 10 years; 10.07 between 10 and 15; 10.06 between 15 and 20; 18.10 between 20 and 30; 14.36 between 30 and 40; 11.20 between 40 and 50; 7.67 between 50 and 60; 4.68 between 60 and 70; 2.09 between 70 and 80; 0.60 between 80 and 90, and 0.06 90 and over. Only two persons attained the century—Sylvia Whipple 102, and Hannah Gully 100, both living in Smithfield on June 1, 1865.

It will be observed that the number under 5 years of age is remarkably low. In 1860, the same class was 11.81, the decline being accounted for from the decrease of births on account of the war. But even this higher number is far below the average of the United States, which, in 1860, was 15.43. In Lower Canada the same class was, in 1852, 18.89 per cent. of the total population.

The report returns a good account of the educational status of the little State. The whole number of children between 5 and 15 years of age was 38,788, of which 33,774 were at school, leaving only 5,014, or 12.9 per cent. who had not attended school during the year. The highest rate of non-attendance was in the manufacturing towns, where the maturer portion of those of the school age were probably employed in the mills and manufacturing establishments. In these towns, also the foreign population chiefly reside, and among the lower classes of these many children are allowed to grow up in ignorance.

In regard to adult ignorance there were in the State, in 1865, 10,181 persons who could not read or write. Of these 15.24 (10.65 white and 4.59 black) per cent. were native born, and 84.76 (Irish 71.83, British 3.84, German 0.43, and others 8.66) per cent. were foreign born. A glance at these figures shows at once and unmistakably the source of the mass of ignorance unveiled, and indicates the direction in which efforts should be made for its removal.

Of 16,910 foreign male persons, only 1,260, or 13.4 per cent., have been naturalized under the laws; and of the whole number of the foreign born in the State (39,703), only one in 31.5 is the owner of real estate.

The number of (184,965) inhabitants of the State that enlisted in the army or navy, during the late war, was 7,521, or one in every 24.6 inhabitants. The number of males between 20 and 50 was 37,474, and hence the same enlistments gives one to every 4.9, or 20.1 per cent. This list includes only the soldiers and sailors of the State residing within its limits in 1865. Those who enlisted and did not return are not included.

The number of different occupations given by the census of 1865 was 348, and the number of persons whose occupations was given was 65,059. The occupations, in which more than 500 are returned, are as follows: blacksmiths 861, carpenters 2,457, clerks 1,927, dressmakers 692, farmers 10,754, (fishermen 497), grocers 631, jewelers 1,215, laborers 5,440, machinists 2,193, merchants 1,150, mariners 1,070, masons 767, operatives 13,604, painters and glaziers 708, servants 3,503, shoemakers 513, tailors and tailoresses 828, teachers 850, teamsters 692.

The productive force of the State is summed up as follows:

Products of agriculture.....	\$7,590,079
“ of fisheries	422,413
“ of manufactures	108,106,395

—making a total of \$111,118,886 per annum. This shows an annual production of \$601 for each man, woman and child in the State. This does not include the products of the whale and other foreign fisheries or other items, which are not found in the productions as reported in Rhode Island.

The agriculture and manufacturers of the State are also accounted for in the volume, but considering the length of the present article we are obliged to postpone any further notice of them to a future time.

Taking the work as a whole we have found it to be the best systematised census that has yet appeared, and we pronounce it highly creditable to its compiler, Dr. Snow, the erudite compiler of the well-known censuses of Providence for 1845 and 1855.

RAILROAD EARNINGS FOR MAY.

The gross earnings for the under-specified railroads for the month of May, 1866 and 1867, and the difference (increase or decrease) between the two periods are exhibited in the subjoined statement:

Railroads.	1866.	1867.	Increase.	Decr'se.
Atlantic and Great Western.....	\$451,477	\$458,370	\$6,893	\$.....
Chicago and Alton.....	339,551	333,621	5,930	.....
Chicago and Great Eastern.....	120,460	89,849	.....	31,011
Chicago and Northwestern.....	735,083	787,736	52,654	.....
Chicago, Rock Island and Pacific.....	325,116	261,916	.....	73,194
Cleveland and Toledo.....	210,783	180,675	.....	30,108
Erie.....	1,101,633	1,132,140	30,508	.....
Illinois Central.....	569,220	477,507	.....	91,643
Marietta and Cincinnati.....	95,664	90,526	.....	5,138
Michigan Central.....	325,196	339,963	.....	31,244
Michigan Southern.....	426,423	358,001	.....	67,592
Milwaukee and Prairie du Chien.....	267,488	119,104	.....	148,383
Milwaukee and St. Paul.....	245,598	230,497	.....	15,101
Ohio and Mississippi.....	233,180	263,930	.....	791
Pittsburg, Fort Wayne and Chicago.....	683,510	578,293	.....	104,218
Toledo, Wabash and Western.....	316,483	329,073	12,645	.....
Western Union.....	86,918	57,853	.....	29,061
Total in May.....	\$3,613,070	\$3,088,325	\$524,745	.....
Total in April.....	5,036,340	5,080,673	334,438	.....

The gross earnings per mile of road operated for the same month of the years, respectively, are shown in the following table:

Railroads.	Length in miles.		Earnings.		Differ'ce	
	1866.	1867.	1866.	1867.	Incr.	Dec.
Atlantic & Great Western.....	607	507	\$990	\$906	\$16	\$.....
Chicago and Alton.....	280	290	1,173	1,309	51	.....
Chicago and Great Eastern.....	224	224	583	400	.....	139
Chicago and Northwestern.....	1,033	1,145	712	638	.....	24
Chicago, Rock Island & Pacific.....	410	410	793	615	.....	178
Cleveland and Toledo.....	173	113	1,313	1,044	.....	174
Erie.....	798	776	1,280	1,448	68	.....
Illinois Central.....	708	703	804	674	.....	130
Marietta and Cincinnati.....	251	251	381	367	.....	21
Michigan Central.....	255	255	1,231	1,173	.....	109
Michigan Southern.....	524	524	814	634	.....	130
Milwaukee & Prairie du Chien.....	224	224	1,143	509	.....	633
Milwaukee and St. Paul.....	275	275	893	645	.....	48
Ohio and Mississippi.....	240	240	833	532	.....	1
Pittsburg, Ft. Wayne and Chicago.....	468	468	1,458	1,235	.....	223
Toledo, Wabash and Western.....	531	531	607	631	24	.....
Western Union.....	177	177	491	227	.....	16
Total in May.....	7,307	7,297	\$917	\$834	\$83	\$83
Total in April.....	7,307	7,297	790	836	26	.....

The above table shows that the gross earnings of the railroads specified

have fallen off in relation to the gross earnings in May, 1866, to the extent of \$83 per mile operated, which is equal to 9.05 per centum. This presentation of a month's business would be a serious matter not only to those most intimately interested in the several lines, but also to the public generally, were the results shown, either a measure of the business transacted or of the net proceeds of that business; but that they are either the one or the other cannot be admitted, the decline in the amount being the natural effect of the same causes which have operated in reducing prices in every department of business, and do not therefore necessarily show a falling off in *net* earnings.

ON THE COLLECTION OF REVENUE.

(Continued from page 451, Vol. 56.)

One of the great articles of production of Pennsylvania is wheat; the annual value of her wheat is more than the annual value of all her iron and its manufactures. In Pennsylvania, nature has indicated that wheat and other grain would yield the largest result for the least labor, and that grain should be the chief product, until such time as the general supply had become so great as not to yield so large a return for the labor employed as would come from working her vast deposits of iron.

At the time Pennsylvania was settled, England had already established iron works, because Nature had indicated iron as one of the natural products of England, by placing there great beds of coal and iron, and but a comparatively small area of arable land.

The farmer of Pennsylvania wants iron, which exists in its crude form under his own farm. England wants wheat. Let us suppose that, under the circumstances as they are in Pennsylvania, the farmer of Pennsylvania can produce a ton of wheat with twenty days' labor and a ton of iron with thirty days' labor, and let us suppose that, under the circumstances as they are in England, the Englishmen can produce a ton of iron with twenty days' labor but it takes him thirty days' to raise a ton of wheat.

The Englishman wants wheat, and the Pennsylvanian wants iron; exchange is free and the barter is made. It is not necessary to express the exchange in money. It is so many days' labor against so many days' labor. The desires of both are satisfied by an aggregate of forty days' labor, resulting in a ton of wheat and a ton of iron—each where it is wanted. The element of transportation may be omitted, as the same conditions apply to Canada and the United States, which are only divided by an imaginary line.

But now comes in the Government of the United States and claims a portion of the labor of the Pennsylvanian—say six days, and each day's labor is measured in Pennsylvania by one dollar. The Government imposes a duty of six dollars on a ton of iron. But as the ton of iron would cost the Pennsylvanian thirty days' labor, or thirty dollars, he will still give twenty days to wheat, six days to the Government, and import his iron. The Englishman will still expend twenty days on iron and exchange it for wheat.

The desire of the Pennsylvania farmer for iron, of the Englishman for

wheat, and of the United States Government for \$6, will all be satisfied by an aggregate of forty-six days' labor.

But the great iron resources of Pennsylvania are not protected; they must be developed, and the Government is induced to put a protective duty of \$12 on a ton of iron: but \$12 represents twelve days' labor for the Pennsylvanian, who wants iron, and therefore it is better for him to give thirty days to making a ton of iron, rather than twenty to wheat, and twelve to the tax. He does so, and gets his iron. The Englishman, having no market for his iron, and wanting wheat, must give thirty days to raising a ton of wheat. The desires of the Englishman and of the American are both met by an aggregate of sixty days' labor. But the United States has no revenue; it wants \$6, but, having been deluded into imposing a protective tariff, it did not get it, and must now impose a direct tax on the Pennsylvanian equal to six days' labor. The three desires are therefore satisfied only by an aggregate of sixty-six days' labor. To sum up:

The Revenue Tariff satisfied the three desires with.....	46 days
The Protective Tariff with.....	66 "

Waste of labor.....	20 days.
---------------------	----------

Disregarding all comity with the Englishman, the Pennsylvanian's desire is satisfied.

And he pays \$6 tax to the Government, under a Revenue Tariff, with.....	26 days
Under the Protective Tariff, with.....	86 "

Waste of home labor.....	10 days
--------------------------	---------

Any one who has read Prof. Perry's admirable book will see that I owe this demonstration to him.

If we wish to understand how the great iron deposits of Pennsylvania would be developed in a natural manner, we have to take the case in a little different form. Suppose twenty men working one day can make a ton of wheat and thirty men a ton of iron; with free trade, ten men have leisure—ten men are unemployed on wheat. Will they not be sure to be trying experiments on the iron which they want? Will they not slowly but surely learn the trade? But, if the whole thirty men are forced by protection into making iron without ever serving an apprenticeship at it, are they as likely to achieve success?

Let me suppose another extreme case: I am a farmer in St. Lawrence County, N. Y., understanding my business; and with one day's labor I can produce a bushel of wheat; in three days' time I, not having learned the trade well, can cobble together a pair of shoes with great waste of leather. On the other side of the river is a poor, ignorant cobbler sent out from England and placed upon a Canada farm; he can make my shoes in a day, but he requires three days to make a bushel of wheat wherewith to feed his family. Shall I not be protected against pauper labor? If I allow his shoes to cross the river, shall I not be reduced to his level? Shall I ever learn shoe-making and become independent of these foreigners who flood us with their shoes, unless Government compels me to employ three days of hard work on shoes, instead of two days of leisure in cutting up leather and trying to learn at my ease.

But suppose this cobbler moves one mile and comes into the United States—in what respect has his labor changed in its relation to mine? As a consumer he now pays a small portion of the United States taxes, which he must add to the price of the shoes he makes, in precisely the same manner as a moderate revenue duty would have been added to the price of the shoes if he had continued to make them in Canada; do I any longer demand such a tax upon the shoes made by him as shall force me to make them myself? Far from it, I scout the idea of a heavy tax on shoes, and hasten to avail myself of the benefit of his cheap labor; yet in England or in Canada he was a pauper, or so near it as to be called so.

To be consistent in the doctrine of protection to American labor, we should impose the very highest rate of duty in our schedule, upon the laborer, and not upon his product; we ought not to permit this flood of immigration; the immigrants can make great many things which we can make ourselves. Let this duty by all means be *ad valorem* and on a home valuation, so that we may as far as possible exclude the most skillful and intelligent workmen; we don't want the result of their skill when it is exerted abroad, and we shall never prosper if they come here and prevent our attaining it ourselves.

There is danger in the abundance of things. We are flooded with foreign commodities—flooded with comforts and luxuries. Protect us, in order that we may labor: it is a privilege to labor; we want to work harder, to get what we consume, than our natural condition requires. Create an artificial scarcity, so that we may enjoy our full right to labor.

Is it the right to labor for which we should so strive? Is labor the end? Is it not rather what labor will give us that we seek? And if we can get what we want with little labor, instead of much, do we regret it?

"But," says the protectionist, "you will never establish manufactures unless they are protected in their infancy." I believe all baby-jumpers and other devices to aid or protect children in their efforts to walk have been discarded, as it has been found better that they should now and then have a tumble, and possibly one occasionally break its neck, rather than that all should grow up with weak legs, even though their legs should get as strong as they ever would have been by the time the children have become old men. And I believe the same process is healthy for infant manufactures as well as for infant children. The most firmly established manufactures in the United States are those which have never been protected to any extent—such as the various manufactures of wood; of boots and shoes; of heavy machinery, such as locomotives; and, above all, of agricultural implements and tools, of clothing, of sewing machines, and so on, to the extent of the larger part of our home manufactures, some of which have grown up in spite of heavy duties on the raw materials of which they are composed.¹ It may here be well to consider the meaning of the terms "raw materials" and "manufacturing."

In the common use of the words, raw materials are things which are produced mainly by hand or manual labor, and are therefore true *manufactures*; but which are changed into finished commodities, not by the hand, but really by machines. We are led to much confusion of ideas by this inaccurate use of words.

We call cotton a raw material, yet to the planter it is a finished commodity, produced by the hand labor of the cultivator of the field, and finished upon the cotton gin.

To the so-called manufacturer, the cotton comes from the gin as a raw material, and in the mill it becomes finished product, as cloth.

But, as cloth, it now goes to a real *manu*-facturer—the sempstress, to whom the cloth is raw material, and who by hand cuts it and makes it into garments; and the garment is now a finished commodity.

But, as a garment, it goes to the farmer, to whom again it is a raw material, by means of which he is enabled to live in comfort, and without which he could not cultivate his farm. It does not cease to be a raw material and become a *finis*-hed commodity until it is worn out; and even then it becomes the raw material of the paper-maker, and may not reach its final end until it has printed upon it an essay “upon the Collection of Revenue,” and is put away upon a library shelf.

In its course, whom shall we protect or give a bounty to?

The manufacturer of the raw cotton?

The manufacturer of the cloth?

The manufacturer of the garment?

The consumer of the garment?

The paper-maker? or, finally—

To the writer of an essay “upon the Collection of Revenue”—who may, at this present moment, really need *personal protection* more than any other?

Shall we not rather seek to collect our revenue as impartially as possible, creating no artificial obstacles to commerce, and leaving each individual to work out his own material salvation, even as he works out his spiritual salvation?

This claim for the protection of infant manufactures never ceases. Under its operation they never seem to grow to manhood, but the larger they grow the more urgent the demand for artificial support. The most urgent and imperative demand for protection now comes from the iron-masters and the wool-growers.

American iron was born into the world more than a hundred years ago, when Pennsylvania was a colony. Great Britain was the mid-wife who presided at the birth, and endeavored to strangle the infant in its cradle; but he, being of a tough and fibrous quality, lived and grew apace, until he could stand alone, if he would only think so. But having been propped up with baby-jumpers and crutches, shoulder-braces, etc., he fears to stand lest he should fall, and demands now to be encompassed with a high wall over which no rude shove shall reach him.

Where the demands of Pennsylvania ever more imperative? Yet what are the facts.

In the fiscal year ending June 30, 1866, a year of very large importations, the total import of iron and steel, and the manufactures thereof, was a trifle over.....	19,000,000
The export of iron and steel, and the manufactures thereof, allowing two-thirds the value of the agricultural implements and printing presses to have been iron and steel, was about.....	5,000,000
Leaving a net import of.....	14,000,000

During the same period, the internal revenue derived from iron and steel of home manufacture, in the forms which are specifically named by law, amounted to \$13,728,133.

The internal taxes alone upon this *infant* home manufacture were nearly equal to the total value of the importation.

It is somewhat difficult to capitalize this tax, as the taxes upon iron and steel were duplicated, and even in some cases quadrupled, but the total value on which this tax was assessed cannot have been less than \$200,000,000, and was probably nearer \$300,000,000. The object in demanding a heavy duty on iron and steel, or any other commodity, can only be to maintain the price in an amount equal to the duty imposed. The demand of Pennsylvania is that the duties shall be raised to a still higher point than they now are, in order to shut out the flood of \$14,000,000 worth of foreign iron, by granting a bounty on over \$200,000,000 of home production. We may well ask Pennsylvania how much longer she will "plead baby?"

I shall perhaps be charged with ingratitude by some of my friends in Pennsylvania, and I might have felt obliged to take another illustration rather than iron, had it not been for the most unreasonable demand of Pennsylvania for a duty on bituminous coal. If not infants in iron manufacture, the men who advocate this duty are infants in intelligence. Suppose New England being without coal, and being obliged to use costly fuel, were to demand that a tax be imposed upon every steam engine used out of New England, and that her own should be exempt; would there not be an outcry which would overwhelm us with scorn and derision? Should we not be charged with the most selfish designs? Yet such a claim would be far more reasonable, than that of Pennsylvania for a duty on coal, which is only a tax on the steam engines of New England, already working at a disadvantage. The impudence of this claim is only exceeded by the ignorance of all economic law exhibited by those who propose it, which ignorance is their only justification.

It is alleged that because we have begun the manufacture of Bessemer steel rails in this country, the price has been reduced by the English manufactures from \$150 to \$110 per ton, or about in that proportion; but those who make this absurd allegation make no note of the enormous extension and improvement in this manufacture in England. If their allegation is true the trade in steel rails in England would be conducted in the following manner. Suppose the parties to be the English manufacturer, the Agent of the Pennsylvania Central Railroad, and the Agent of the Pacha of Egypt.

Penn. Agent.—What is the price of steel rails?

Manufacturer.—For what railroad?

Penn. Agent.—For the Pennsylvania Central.

Manufacturer.—The price is \$110 per ton, delivered.

Agent of the Pacha.—I want an equal quantity at the same price.

Manufacturer.—Our price for Egypt is \$150.

Agent of Pacha.—Have you two prices?

Manufacturer.—Yes, sir; they are endeavoring to establish the manufacture of steel rails in Pennsylvania, and all the English manufactures have combined to break them down; we charge \$110 to Yankees, and \$150 to all others.

Agent of Pacha.—But you make a profit at \$110.

Manufacturer.—Oh, yes, certainly: we don't make a practice of selling at less than cost.

Agent of Pacha.—Good morning, sir; I will get my rails in Prussia, or wait until the Americans get started. If you make a profit at \$110, and charge me \$150, Pennsylvania will soon supply me at less than \$150, even if you supply her own railroads at \$110.

I believe that any business man must see that the alleged effect of the few small steel-rail establishments in this country is as nothing compared to the effect of the competition in England. We cannot cripple our whole railroad system, cause all our transportation to be more costly, and retard the development of our western country, by granting any higher bounties to a few rail-makers, than we now pay. Yet I do not ask Pennsylvania to cease at once to demand duties upon iron and steel, nor would I willingly submit at once to a great reduction in the duties upon cotton manufactures. Any such abrupt changes would destroy capital and reduce production.

Our problem is to maintain capital, and increase production, and this can only be done by a judicious reduction or abatement of internal taxes, and then by a gradual reduction of duties; and I for one have always advocated the entire abatement, first and before all others, of the internal taxes upon metals and the manufactures of metal. The metals are at the foundation of all other industry, and any tax upon them is an impediment to the production of almost every commodity needed by men. It is to be hoped, that, whatever Congress may fail to do in the matter of amending our present onerous tax laws, they will not fail to abate all internal taxes upon metals, and the manufactures of metal, and to refuse all requests for an advance in the duties.

The repeal of the cotton tax should immediately follow, if it should not precede. This tax was never justifiable, except as a temporary expedient; the least onerous method would have been to have collected it of the manufactures for the home consumption, and of the merchants at the port of export. To attempt to collect of the producers checks the change from the plantation to the small farm system, and checks production. It may be added, that the time is not far off, but will come probably within two or three years, when there will be a surplus of cotton in the world. (See appendix C).

I think Boston to-day affords a good illustration of the evils of protection. The conditions of soil, climate and coast, indicated maritime pursuits as the province of New England men; and she engaged in them chiefly until the South forced a protective tariff upon the country. As this destroyed commerce, New England developed textile manufactures before their time, and then, becoming converted to the doctrine of protection, continued to foster them by the same process. The result is, that a large amount of the capital, and a large amount of the business capacity of Boston which should have been applied to railroads, steamships and commerce has gone into manufactures; consequently, Boston commerce declines, and young men emigrate. Commerce would have employed the young men at home, or in voyages ending at home; but textile manufactures employ only a few treasurers, agents or commission merchants, and a very large force of operatives or laborers. There are too many young men for the number of places equal to their capacity, and they must migrate. I think the population of New England has not been improved by this forced establishment of textile manufactures.

If, as I have attempted to demonstrate, a tariff is but a tax under another name, then it is a burden upon the labor of the country, and is subject to precisely the same law as an internal tax.

I now come to another point to which I have adverted, viz, that in the collection of a given amount of revenue, more or less evil could be done, according to the wisdom or unwisdom of the law. Nations which are older than ourselves in the matter of taxes, select certain articles to bear the heavier portion of the burden, rather than lay an even portion on all. It is an axiom, that the consumers pay all taxes in the long run; but this should always be qualified by adding, that their consumption of taxed commodities is regulated by their production. The great body of consumers and the great body of producers are identical, and they procure the taxed articles which they consume in exchange for the articles they produce.

The articles thus selected for taxation are tea, coffee, sugar, spices, spirits, tobacco and other commodities, the consumption of which is voluntary, and the deprivation of which does not impede production. None of the articles named are essential to production, in the sense that meat, bread, iron and clothing are essential; and therefore the consumer may use a little more or less, according to the price, and still cultivate as many acres or operate as much machinery. England keeps her custom-house because tea, coffee, sugar and spirits are natural subjects of taxation; but, if they were all produced in England, she would tax them by an excise duty at the same rate, and abolish her custom-house.

But now let us see if we really limit the power of the consumer to purchase tea and coffee, by a high duty on them, and no duty on iron, rather than by a moderate duty on each. Let us return to the Pennsylvanian and the Englishman, and remember the relative condition of labor on iron and wheat.

Let us suppose that each was employed the whole year, save thirty days, in feeding and clothing his family, and has just thirty days to give to accumulating a surplus of capital. The Englishman, for some reason, desires to have, as the representative of his surplus labor amounting to thirty days, a ton of wheat, which he can make in thirty days; but he can make a ton of iron in twenty. The Pennsylvanian must have a ton of iron, which he can make in thirty days; but he can make a ton of wheat in twenty. By free exchange, each can satisfy his desire with twenty days' labor, and each will thus have ten days to spare.

Wanting tea, each will work upon some commodity to exchange for tea. We will say that the Pennsylvanian wants five pounds of tea, and with five days' work can get it free of duty; the Government puts a duty on tea equal to five days more, but the Pennsylvanian still has five days to spare and works it out. He has his ton of wheat, his five pounds of tea, and has paid five days work or five dollars to the Government. But, under a system of protection to iron, by which the Pennsylvanian has been caused to give thirty days to iron, he has only the iron; he has no tea; the Government has no revenue, and must now take a part of his ton of iron.

Free exchange of the results of labor, free trade, free commerce, gives to each nation the advantage of the different gifts of soil and climate which God has bestowed upon the several sections of the earth. It in-

creases the abundance of the things which give comfort or enjoyment to all people. It does not degrade the labor, or reduce the purchasing power of the wages in the most favored country, like our own; but, while it would yield to us more comfort and more luxury, it would elevate the oppressed of other nations and civilize the barbarian.

The individual laborer, who is skilful in farming, or well placed on good land, and whose wages are high because his product is large, does not give up his occupation and go to making shoes because some poor shoemaker near him is starving and willing to work cheap; then why should Uncle Sam, with his rich farm, and his domain, scarce touched by the hand of man, refuse to employ the pauper labor of Europe, of which we hear so much, because the paupers work cheap?

Much of this hue and cry about pauper labor is merely clap-trap, the pauper labor of England is mainly in the agricultural counties. Of the same nature is the common talk about the flood of foreign commodities with which we are overwhelmed. Let any one analyze the imports for the year 1866, and out of \$868,000,000 on which duties were paid he will find less than \$68,000,000 consisted of articles of luxury, and over \$300,000,000 were articles of comfort or of necessity. It is alleged that the total value of all our products in the year 1866 was \$6,000,000,000; and it is tolerably well ascertained that the value of all our products in 1860 was \$4,000,000,000, on a gold basis. If the estimate for 1866 is correct, then our flood of foreign luxuries was about equal to one per cent on our production!

Upon the third premise, which seems to me fundamental, viz, that gold and silver, either in the form of bullion or money, are only useful up to a certain amount, which will defuse itself, if let to natural laws, I shall spend but a moment.

Gold and silver, or specie money, has been adopted by the world as the measure of value of all commodities, and, being an article of universal desire, it has value in relation to other commodities in the proportion which the labor required to mine, smelt and refine the specie bears to the labor required to produce the other commodities. Now if the exchange of all other products of labor be left free, except so far as the need of revenue causes a tax to be imposed upon the so-called natural subjects of taxation, then the exchange of specie as one of the products of labor must be left free also, and it will follow the natural law, remaining where it is wanted most. The country which continues to use it as a measure of value will want it more than the country which has substituted paper as measure, or wampum or cowrie shells, or any other substitute which ignorance or necessity may devise, and the country which wants it will get it because it will give more of other products of labor for it, unless those products are prevented from entering the country which has the gold. If importations are prohibited or retarded, then gold remains in the country unnaturally, and causes an advance in prices the same as an issue of paper money. If we could prohibit imports absolutely, and continue to mine \$100,000,000 of specie a year, its value in this country, in relation to other commodities, would, of course, be far less. This was done in Japan. Japan produces gold. but, by non-intercourse, it had so accumulated it as to cause it to lose a part of its purchasing power, or relation to other products; and the first outside barbarians who opened

trade with Japan, obtained much more gold for their commodities than they could have got elsewhere.

We can take the same position in the world as Japan, if we inflate our currency and prohibit imports; but our gold will then have no value except in the arts, as paper can be made with less labor than gold can be mined.

Taxation of any kind is surely a burden, but it has its compensation. The desire to live as comfortably, or, in other words, the desire to produce as much for one's own use, despite all taxes, stimulates invention; and every invention, by increasing the productive force of the laborer, increases the result. The invention of improved agricultural machinery kept our crops increasing all through the war, and I suppose we can now produce as much more than we formerly could as would suffice to pay all the taxes without using any more effort or expending any more hours of labor in the aggregate; but the trouble is, the increase is not equitably divided, and cannot be under our present system of currency: therefore the burden presses more and more upon the mass of the people, and will continue to do so until the proper correctives are applied.

Now as to the correctives. The first essential thing to be observed is not to make any rapid change. Because it would have been better to have collected the revenue from what I have called the natural subjects of taxation at the beginning and up to the present time, it by no means follows that we should jump to that system at one bound.

Our industry has been diverted from its natural channels by protection, and we must slowly and cautiously guide it back, else we may all be paralyzed. We need the immediate establishment of a permanent board of Commissioners of Revenue, consisting of at least five competent men, secure in their tenure of office, well paid, and selected because of their fitness and ability. Mr. Wells alone, with work piled upon him which five men could not have accomplished in the very best manner in the time given, has yet made a report of inestimable value, and such as was never presented to the country before.

A permanent board, known to have the matter of revenue in charge, would take it mainly out of party politics. The people could not afford to have it trifled with. The Board of Commissioners would prepare changes and give fair warning, thus giving each branch of industry time to prepare, and preventing disaster.

Slowly, but surely and safely, can this country be brought to a system by which it shall secure an ample revenue from almost as few articles or interests as are now taxed in Great Britain. If any one doubts this, let him consider. We have now, as I suppose, a larger population, and though not as much accumulated capital, yet, what is more valuable, a better educated people, and a country whose resources have hardly been touched, and whose productive capacity may be indefinitely increased. Can any one doubt that a given number of hours of American labor will yield a larger result than a given number of hours of English labor? Aggregate all the American laborers into one, and all the English laborers into one. Put the Yankee education and the Yankee versatility, and the innumerable labor-saving devices of the Yankee, and also the varieties of our soil and climate, against the great works and mills, and greater accumulated capital of the Englishman, and which would get the greatest

result for his labor? I think every one here will honestly answer, The Yankee.

Then he will consume more tea and coffee and sugar and spirits and spices, and have a greater income, and require more stamps to represent more transactions, than the Englishman; and, consequently, the same rates of tax upon these various items will pay our larger rate of interest, but our less cost of army and navy and civil service, and pay our debt besides as rapidly as it should be paid. We are paying debt too fast now. The faster we try to pay at the beginning, the longer we shall be in paying the whole.

The Secretary of the Treasury estimates the expenses of the Government, for the fiscal year, ending June 30, 1868, as follows, in round numbers:

Civil service.....	\$50,000,000
Pensions and Indians	25,000,000
War Department.....	50,000,000
Navy.....	30,000,000
Interest.....	185,000,000
Total.....	290,000,000

We may soon reduce the expenses of the War and Navy Departments to an aggregate of \$50,000,000, and ought to increase the interest to \$150,000,000 by funding the legal tenders. The estimate would then stand:

Civil Service, Pensions and Indians.....	\$75,000,000
War and Navy.....	50,000,000
Interest.....	150,000,000
	<u>275,000,000</u>
Add for reduction of debt.....	25,000,000
Total.....	\$300,000,000

Population increases by births and immigration more than three per cent per annum on the average, but production increases in a much greater ratio; and rates of taxation so adjusted as to yield \$300,000,000 now would doubtless yield \$400,000,000 within ten years. The expenses of the Government would doubtless increase, but, in the absence of war, not more than the saving of interest on the debt annually paid would amount to.*

* If consumption should only increase at the rate of three per cent per annum, the rate would, in ten years, cause the avails of taxes to be about thirty per cent more. The rates of taxation, which would now give \$300,000,000 would then give \$390,000,000.

If consumption should increase five per cent per annum, that rate would yield in the tenth year about \$450,000,000.

If we allow an increase of consumption at the rate of five per cent per annum, the following sums would be available in each year for the payment of debt, and in this estimate I allow a present need of \$300,000,000, and that our expenses shall increase

Let us now see how near we have already come to securing the sum of \$300,000,000, from the sources from which revenue can be derived with the least injury.

In the fiscal year ending June 30, 1866, the taxes imposed, either under the Tariff or Internal Revenue Laws upon the following articles of interests: Incomes, Stamps, Licenses, Banks and Insurance Companies, Legacies and Successions, Gross Receipts of Railroads, Canals, Lotteries, Telegraph Companies, etc., Tea Coffee, Sugar, Spices, Spirits and Wines, Fermented Liquors, Tobacco, and Manufactures of Silk, amounted to about \$260,000,000, of which over \$80,000,000 was in gold from the Customs.

The Income tax will be reduced by being made uniform, but the tax on spirits will be increased by the enforcement of the law, it having been over \$37,000,000 in the calendar year ending Dec. 31, 1866, against \$29,000,000 in the fiscal year ending June 30, 1866.

It may be alleged that this year yielded more than an average, and there is some force in the objection; but, if we remove the internal taxes on iron, steel and on manufacturing generally, that is if we remove the impediments to production, I believe the consumption of tea, coffee, etc.,

as fast as our interest decreases, or that we shall only decrease debt by the amount we get over \$300,000,000.

Year	per cent		Year	per cent	
1st on 300,000,000,	5....	\$15,000,000	12th on 300,000,000,	60....	\$180,000,000
2d "	10....	30,000,000	13th "	65....	195,000,000
3d "	15....	45,000,000	14th "	70....	210,000,000
4th "	20....	60,000,000	15th "	75....	225,000,000
5th "	25....	75,000,000	16th "	80....	240,000,000
6th "	30....	90,000,000	17th "	85....	255,000,000
7th "	35....	105,000,000	18th "	90....	270,000,000
8th "	40....	120,000,000	19th "	95....	285,000,000
9th "	45....	135,000,000	20th "	100....	300,000,000
10th "	50....	150,000,000			
11th "	55....	165,000,000			\$3,150,000,000

Or in less than twenty years the whole debt will be paid, and we should have \$500,000,000 to spare to build two or three Pacific Railroads, a ship canal across the Isthmus of Darien, and a few more works of the like character.

If we allow an increase of the results of taxation at the rate of the increase of population, say only at three per cent, and allow \$300,000,000 as the constant amount required for expenses and interest, we have the following result:

Per cent	Year		Per cent	Year	
3 on 300,000,000,	1st....	\$9,000,000	3 on 300,000,000,	14th....	126,000,000
" "	2d....	18,000,000	" "	15th....	135,000,000
" "	3d....	27,000,000	" "	16th....	144,000,000
" "	4th....	36,000,000	" "	17th....	153,000,000
" "	5th....	45,000,000	" "	18th....	162,000,000
" "	6th....	54,000,000	" "	19th....	171,000,000
" "	7th....	63,000,000	" "	20th....	180,000,000
" "	8th....	72,000,000	" "	21st....	189,000,000
" "	9th....	81,000,000	" "	22d....	198,000,000
" "	10th....	90,000,000	" "	23d....	207,000,000
" "	11th....	99,000,000	" "	24th....	216,000,000
" "	12th....	108,000,000			
" "	13th....	117,000,000			\$2,702,000,000

or more than the entire debt in twenty-four years.

the use of stamps and the aggregate of incomes, would increase; at any rate we could safely count on \$250,000,000 from such sources. In confirmation of which opinion see the letter of Hon. D. A. Wells hereto appended.

If we can get \$250,000,000 from these sources, we should have but \$50,000,000 left to obtain from all other foreign imports; but to reduce the duties thereon so as to yield but \$50,000,000 would be too abrupt a change—it would be better to raise \$75,000,000. The latter sum would probably be yielded by a tariff at about the present average rate of forty-eight per cent, less twelve to fifteen per cent reduction, as the equivalent for the reduction in internal taxes—say by an average rate of duties of thirty-three and a third per cent. Such rate would really give as much protection to home industry as the present tariff, if home industry is relieved from the present onerous internal taxes. There are few textile manufacturers, or none, who would not say that a net duty of thirty per cent on foreign imports would be better for them, with the internal taxes removed, than the present high rates of duty are with the internal taxes as now imposed.

To this practical agreement I believe New England manufacturers would come. The protectionist would say, twenty-five to thirty per cent net duty gives us all we want; and the free trader would say, We advocate for the present twenty-five to thirty per cent net duty for the purpose of obtaining revenue. The result is the same, but it is of the utmost importance that we start from the free trade rather than the protective point of view. The free trader cannot be swerved from a uniform system, because he looks upon the whole thing only as a necessary evil; but the protectionist is constantly in danger, because he thinks he can confer a benefit and is therefore at the mercy of each special interest.

Hence the futility of the attempts to pass a tariff bill at the two last sessions of Congress. Each man put in his brick, until the whole structure became absurd and ridiculous, and at last it all tumbled to the ground together.

When the Committee of Ways and Means shall frame a moderate tariff, as a revenue measure, upon a fixed principle, firmly assuring the representatives of each special interest that they must adjust themselves to it as best they may, it will be very certain that the common sense of the people will compel the enactment of the law thus framed.

The question of protection has been much complicated, during the late sessions of Congress, by the claim made by the Western and Middle States for protection to agricultural products and upon materials in their primary or secondary condition, such as copper ore and regulus, raw and lined flax, hemp, jute, linseed, hides, goat-skins, salt, etc. It would seem as if the West had suddenly come to the conclusion that New England, by means of protection to manufactures, had been making money out of them, and that it was time for them to get a return from New England.

I cannot deny that if New England has derived benefit from the bounty granted under the name of protective duties, which I doubt, so far she has prospered at the expense of the rest of the country. I do utterly deny, however, that this special benefit has been intentionally secured by the advocates of protection. They have, and do still earnestly believe, that protection is a benefit to the whole community, and that their own

gain is but a proportional part of the general gain. I think, however, they will find it somewhat difficult to meet the claims of the Western men, if they adhere to the doctrine of the expediency of protection; and that such is actually the case, is proved by the recent combination of the wool growers and the woollen manufacturers.

The wool growers' claim has been admitted, and a protective duty has been placed upon foreign wool. This claim might have been presented in a much stronger manner than it has been. The wool growers might have said to the manufacturers, "You advocate protection to American labor, and insist that you are its representatives because you are manufacturers: your claim is well grounded. American labor should be protected, and, if this is to be secured by protection to manufactures, *we* are the real manufacturers. Nature has given such conditions of climate and soil to Ohio that to make wool we must *with our hands* build fences and barns, and cultivate the land, and also shear the sheep. Our wool is manufacture; and, in numbers, we, the agriculturists, are greater than those who operate your machinery.

The manufacturers of woollen fabrics must admit the claim, and they have done so. The result is a higher bounty to each of these interests.

The claim of the wool grower cannot be met by an advocate of the principle or expediency of protection, but can be easily controverted by the advocate of free trade. What is the claim of the wool grower of Ohio but this, that he shall substitute human labor for the free sunshine which nature has given to South Africa, to Syria, and to South America; and that the community who use wool in the form of woollen garments must be made to pay for such useless labor.

The wool of South Africa and South America may be said to represent four parts sunshine and soil, gratuitous and common to all, to one part of human labor measured at the rate of twenty-five cents per day. The wool of Ohio represents, on the contrary, two parts of sunshine and soil, to three parts of human labor measured at the rate of \$1 per day.

Protection to wool is only an artificial impediment by which we shall be prevented from enjoying the large bounty of nature with which God has endowed South Africa in this one respect. We refuse it, because it is gratuitous and common, and, as a nation of 36,000,000, we charge ourselves with a bounty for the possible benefit of half a million interested in wool growing.

Bastiat's satire, in the form of a petition of the candle-makers and tallow-chandlers of Paris to be protected against the light of the sun, by having all the windows closed, and the streets roofed over, is not more absurd.

On the other hand, can the manufacturer of woollen cloths and other fabrics substantiate his claim to protection? He has no greater claim to a bounty; and has, at this time, only a right to be spared the disaster which a sudden change in the revenue policy would cause.*

To the advocate of a revenue tariff, from the free-trade stand-point, the

* Such disaster as overwhelmed the manufacturers of worsted goods, when by the sudden, and as I believe most unwise abrogation of the Reciprocity Treaty, the coarse Canada wool, which had been free, became subject to a heavy duty.

problem is perfectly simple. His ground is this. If we had no expenses, we should need no revenue, and our industry would assume that exact measure of diversity which our soil and climate indicated, and the intelligence of our people rendered possible. Our true prosperity would consist in the abundance of the commodities which we desire and use, and not in the amount of money by which we measure them. Our laboring people would secure the most comfort and the most rapid progress, not by high wages—the result of an artificial scarcity—but with low wages and a natural abundance of commodities.

But we must have a revenue; how shall we obtain it? Free trade and direct taxation we almost unanimously reject, and protection we equally reject.

Should we not then first tax such articles as are not of prime necessity—such as tea, coffee, sugar, liquors, spices and silk goods; next, the interests which are the farthest removed from labor—such as licenses, incomes, stamps, banks and the like?

When we have exhausted these sources of revenue, should we not rather levy a duty upon such commodities as represent the larger amount of human labor, skill and invention, and the lesser amount of the gratuity of Nature?

Wool, hemp, jute, cotton, copper, ore, salt, linseed, hides, skins and the like represent commodities which are the product mainly of Nature, supplemented by a small degree of the effort or labor of man, and that labor of the lowest grade. If we place an obstacle in the way of the importation of the free gifts of Nature, we place ourselves at a disadvantage as compared with all other nations who accept them thankfully.

We would select rather, as the sources from which we can derive the remainder of our revenue with the least disadvantage, such commodities as are mainly the result of human labor or skill, and these we find in what are called manufactures; in these we find but a small portion of the gratuity of nature, and a large portion of the skill or invention and of the labor of man. And as other countries have, in the production of certain manufactures (using the word manufactures in its ordinary sense), greater skill, and more abundant and cheaper labor than we have, we can impose a tariff for revenue upon such manufactures, from which shall arise a certain amount of stimulus to home production; but which, being imposed at a rate representing a sum less than the difference in the measure of the labor required to produce it at home, will yield the revenue at a cost to the community of the revenue itself and no more.

I cannot close this treatise in a better manner than by submitting the following propositions:

Perfect protection is impracticable; but, if practicable, would cause all revenue from imports to cease, and render direct taxation imperative.

If perfect and equal protection were practicable, it would simply result in a general rise in prices and wages, and since it would prevent exports and consequently imports, it would decrease the aggregate of commodities, or in other words, the aggregate result of labor; and since capital is the surplus result of labor, a decrease in the aggregate would be a decrease in the surplus. The amount of capital would therefore be less in proportion to the number of laborers, and this condition of things would be to the disadvantage of the laborer, since, as we have before quoted from

Bastiat, "In proportion to the increase of capital, the absolute share of the total product falling to the capitalist is augmented, and his relative share is diminished; while on the contrary the laborer's share is increased both absolutely and relatively."

Imperfect, or partial protection adds to the tax which accrues to the Government a bounty to individuals or classes, in many cases more than equal to the amount of revenue secured by the Government.

A duty or tax upon articles which are mainly the result of a small amount of unskilled labor, by which the gratuities of nature are put into form for use, and which are known as raw materials, is an impediment to the use of the free gifts of God, which should be common to all. The nation imposing such a duty places itself at a disadvantage as compared with all other nations.

A duty or tax upon articles which are mainly the result of human labor, aided by the largest amount of skill or invention, commonly known as manufacturers, will yield a revenue at the cost to the community only of the revenue thus raised.

Protection decreases the abundance of commodities, and increases the absolute share of a small number of the people at the cost of a portion of the relative share of each.

Free Trade increases the abundance of commodities, gives to each the relative share which his education, skill or capital entitle him to, and leads to the harmonious development of the powers of all.

We shall reach specie payment, not by the prohibition of imports but by the increase of the products of labor, other than gold or silver, to such a point that other nations will buy them on account of their cheapness, rather than our specie, and thus enable us to retain specie and export cotton, oil, wheat, etc., in full for our imports.

The larger portion of the revenue now required by the United States can be obtained from commodities which are not absolutely necessary to the productive power of the people, and the remainder from a moderate revenue tariff which shall cost the people only the amount of revenue thus obtained.

A reduction of the aggregate of taxation from \$16.04 currency or \$11.46 gold per head to \$8.60 per head will yield a revenue sufficient to meet the probable expenses of the Government, and pay the debt in less than twenty years. (See appendix B).

The amount of \$8.60 per head can now be obtained from very moderate rates of taxes and duties, as compared with what we have been paying; and, as wealth, production and consumption, increase faster than population, a less and less rate of tax or duty upon commodities or interests will yield the requisite amount per head.

To secure these benefits, stability is absolutely essential; and no stability is possible until we mature and persistently follow a system in regard to the currency which shall, as soon as possible, lead us to specie payment. An inconvertible paper currency enables the few to tax the many in the most onerous and unjust manner, and judicious but uniform and persistent contraction of the currency is the first and most imperative duty of the Government.

As some surprise has been expressed, that these views should emanate from a manufacturer of cotton goods, I will add that I believe a gradual

and judicious reduction in the duties upon foreign commodities, in the manner proposed—of course preceded by an entire abolition of the internal taxes upon manufactures—will result in a more permanent and uniform condition of prosperity in the manufacture of textile fabrics, as well as of all other commodities, than we have ever yet enjoyed. If we can come slowly but surely to what is called British Free Trade, we shall share in the increase of wealth which that system has brought to Great Britain—only the benefit to us would be greater, as our natural advantages and variety of resources are greater. British Free Trade is the result of the longest experience and the greatest amount of intelligence applied to the collection of revenue; I trust it may not be many years before the people of England will learn from us the true principles upon which the laws relating to the tenure of land, the Church establishment and popular education should be based. Upon these points they are yet under the control of protective or bounty laws of the most vicious character, and which render the increase of wealth which they have derived from the modifications of their revenue system less beneficial because of the partial and inequitable division of such increase of wealth which they cause or permit.

The world demands to be supplied with the various commodities called manufactures, such as textile fabrics, iron ware, agricultural implements, etc., etc. The question is, who shall supply such commodities? Thus far, the practical answer has been, England; and we may well ask ourselves why this has been. Labor is not as cheap in England as in Germany, neither is labor as cheap in England or Germany as in India or China; yet the dear laborer of England rather than the cheap laborer of Germany supplies the inhabitants of China and of India with textile fabrics. Why is this? A complete answer could only be given by a Buckle or a Lecky; but we may glance at some of the causes.

1. The possession of large deposits of coal and iron first enabled England to supplement manual labor by cheap machinery.

2. The intelligence of England soonest relieved commerce from the trammels and fallacies of the "mercantile system."

3. The possession of coal and iron in abundance having enabled England to thrive in spite of the Protective System to which she long adhered, she has led all other nations in the adoption of what is called British Free Trade, and by that has been enabled to accumulate wealth faster than other nations which have a better although not the best system of land tenure, like France, or a far better system of education, like Germany.

4. Under the system of British Free Trade she receives from all parts of the world such commodities as their conditions of soil, climate and population, enable them to produce cheaper, paying therefor in the commodities which she can produce better or cheaper than they. She places no artificial obstacle in the way of any import because it is cheap, but simply imposes duties, *for revenue*, on a few articles of universal consumption and difficult to smuggle.

How shall we compete with England in supplying the demand of the world, for commodities, and thus secure to ourselves a greater abundance of the necessities, comforts or luxuries of life, for such is the only incentive to commerce or exchange? Neither nations nor individuals will ever es-

tablish trade of exchange with each other unless each shall in the long run get more than he gives. No permanent trade is possible where the satisfaction or gain is all on one side. The mutuality of services rendered, is essential to the continuance of mutual exchange or trade.

We want more foreign luxuries and comforts than England, because the great mass of our people can afford them better, and we have more natural resources than England, in the shape of easily worked mines, a better climate for the breeding of sheep and the product of wool, almost a monopoly in ordinary times in the production of cotton, and in all farming operations a superiority in natural advantages hardly to be measured, and therefore we have far greater power to create wealth, and in the production of wealth to combine the larger amount of the gratuity of nature with the smaller amount of labor.

I can only see one answer to the question, how we shall compete with England in supplying the world with manufactured articles, and that is by adopting the same system of British free trade as soon as our need of revenue, and a cautious, slow and judicious method in making the change, will allow us to do it.

Freedom of trade, leads to the free movement of the laborer, and he will surely seek that country where he can secure the most comfort and the best conditions of life in return for his wages and it matters not whether his wages be measured at a high or low rate. Our natural advantages would have induced a larger immigration, and would, I believe, have been more firmly established to-day and upon a larger scale than we have ever dreamed of, had we not impeded the importation of foreign commodities by protective duties, and thus confined ourselves mainly to the home market for our manufactures. We shall again share with England in the commerce of the world, and in the profit of that commerce, when we cease to deprive ourselves of the benefit of our natural advantages over England, by adherence to the principle, or rather the want of principle, involved in laws imposed for the purpose of protection.

DEBT AND FINANCES OF CHICAGO.

The tenth annual statement of the Comptroller of Chicago, covering the fiscal year ending April 1, 1867, supplies full information relating to the financial affairs of the city and the transactions of the year then closed. The following is a statement of the public debt outstanding at the end of the fiscal year:

<i>Municipal Debt (old issues), viz:</i>		<i>Municipal Debt (schools), viz:</i>	
7 p. c. bonds, due July, 1866.....	\$1,000	7 p. c. bonds, due July, 1866.....	\$25,000
6 " " due Jan., 1867.....	1,000	7 " " due Jan., 1866.....	25,000
7 " " due Jan., 1874.....	60,000	7 " " due Jan., 1867.....	20,000
20 " " due Jan., 1868.....	1,000	<i>Sewerage Debt, viz:</i>	
6 " " due July, 1873.....	50,000	7 p. c. bonds (1st loan).....	\$413,000
6 " " due July, 1874.....	40,000	6 " " (1st loan).....	87,000
6 " " due July, 1875.....	100,000	7 " " (2d & 3d loans, including	
6 " " due July, 1876.....	100,000	40 bonds charged B. Lind, Treasurer	850,000
<i>Municipal Debt (new issues), viz:</i>		<i>River Improvement Debt, viz:</i>	
7 p. c. bonds, due Dec., 1873.....	\$39,000	7 p. c. bonds, due July, 1860.....	\$168,000
7 " " due Apr., 1881.....	904,500	<i>Water Debt, viz:</i>	
7 " " due Apr., 1886.....	84,000	6 p. c. bonds.....	1,080,000
7 " " due July, 1886.....	25,000	7 " ".....	790,000

RECAPITULATION.

	1866.	1867.		
Funded debt (old issues).....	\$355,000	(\$355,000	Decrease..	\$2,000
" (new issues).....	960,500	962,500	Increase..	2,000
School construction debt.....	60,000	70,000	Increase..	10,000
Sewerage debt.....	1,226,000	1,269,000	Increase..	43,000
River Improvement debt.....	98,000	168,000	Increase..	70,000
Water debt.....	1,669,000	1,680,000	Increase..	11,000
Total funded debt	\$4,353,500	\$4,787,500	Increase..	\$404,000

The floating debt of the city, consisting chiefly of certificates given for temporary loans, payments for schools and sanitary purposes, judgments, water fund, etc.—

Amounted to.....	\$398,926 12
Bills payable (\$4,350), warrants on Treas. (236,114 64), and city orders (\$174 84)	240,638 33
Making a total floating of.....	\$639,564 50

The amount in the treasury at the close of the fiscal year to the credit of the several funds was \$778,990 66. The amount of warrants and city orders outstanding drawn upon the treasury was (as above) \$236,288 38. Net balance to credit, \$542,702 28. It will be seen from the above exhibit that the bonded debt is gradually increasing; and, the Comptroller continues, "if we keep pace with our rapid increase of population, it must continue to increase upon us for many years to come. The water-works will require during the present year (1867-68) not less than \$300,000 to complete the buildings, engines, and improvements that are imperatively demanded. The erection of school buildings, sewerage, river improvements (deepening of the Illinois and Michigan canal), and tunnels, will add, perhaps, \$500,000 to \$800,000, so that at the end of the present fiscal year the bonded debt of the city will not fall much short of \$6,000,000; and when all these improvements shall have been completed, for which bonds are authorized to be issued, the bonded debt cannot vary much from \$10,000,000, of which about \$5,000,000 have been provided for, to be paid by receipts from water, sewerage, sinking fund, and probable State assumption of river improvement bonds. The total city debt at the present time is \$5,397,064 50. Of this sum \$398,926 12 is for temporary loans, viz.: \$222,159 81 for the water works (to be paid from the proceeds of bonds to be issued) and the balance for school purposes (purchase of lots and erecting school buildings) sanitary expenses, judgments, &c." The rate and amount of tax levied, and the purposes for which levied for the service of the year ending April 1, 1867, were as follows:

Purpose.	Rate.	Amount.	Purpose.	Rate.	Amount.
General fund.....	4½ p. 1,000	\$386,789 68	Sewerage fund.....	2 p. 1,000	\$171,906 50
General sinking fund. 1	"	85,953 25	Street & alley fund ... 3	"	171,906 50
Interest fund..... 1	"	85,953 25	Street lamp fund..... 1½	"	23,929 88
Improvement fund..... 1	"	85,953 25	Temp'y loan fund ½	"	42,976 62
Police fund..... 8	"	257,389 75	Total.....	20 p. 1,000	\$1,719,985 00
Reform school fund..... ½	"	42,976 62			
School tax fund..... 3	"	257,389 75			

The receipts from general taxes for the year, including \$44,735 64 collected on the tax warrants of 1863 and 1865, amounted to the sum of \$1,559,502 84; the receipts from special assessment warrants, including miscellaneous receipts from the Board of Public Works and other sources, to \$478,540 43; from licenses \$153,858 84; from fines in the police

courts \$81,038 45; from Recorder's court, rents, &c., \$15,580 63, and from a judgment \$25,492 20. Including \$901,863 17 balance from previous year, bills payable \$159,226 11, and bonds \$6,400, the total means of the city treasury amounted to \$4,864,933 44.

The principal disbursements, were on account of: Public works \$385,871 17, certificates \$120,575 00; Bridewells and cemetery \$55,227 07; evening schools \$6,957 08; Fire Department \$254,409 41; fuel \$31,217 23; health department \$61,387 86; interest \$100,612 79; judgments \$22,151 11; lamp districts \$120,922 21; permanent improvements \$15,391 13; printing and stationery \$17,585 66; police \$307,811 44; Receiver's court \$28,591 92, redemption \$13,861 18; Reform school \$73,299 09; river improvements \$129,162 37; salaries \$47,247 50; schools \$412,367 55; sewerage \$416,546 48; sewerage, sinking fund, \$20,842 50; special assessments \$685,903 76; tunnel \$19,205 85; water \$666,791 89, &c., &c.—total \$4,085,942 78, leaving in Treasury \$778,990 66.

The following statement gives a summary view of the population, valuation and taxation at the stated periods for the past 30 years:

Year.	Total pop.	Assessed Valuation.	Value.	Am't	Taxation.
	ulation.	Est'te. Personal.	Total.	p. cap.	p. cap. p. \$100.
1837.....	4,170	\$235,842	\$238,842	\$56 80	\$5.905 1/2
1840.....	4,479	94,437	94,437	81 15	4.721 85
1843.....	7,550	962,221	479,093	144,314	190 14
1846.....	13,088	2,273,171	791,851	3,065	253
1846.....	14,169	3,654,425	857,231	4,521,022	316 56
1847.....	16,559	4,995,446	858,704	5,849,636	346 06
1849.....	20,023	4,998,266	1,302,174	6,300	314 66
1849.....	23,047	5,635	1,496,147	6,676,440	246 21
1850.....	29,963	5,965	1,554,284	7,220,666	240 97
1853.....	59,130	18,977	3,711,154	16,841	254 68
1855.....	80,000	31,500	3,355,593	28,923,833	337 41
1856.....	84,113	35,308	5,843,778	31,736,634	377 30
1860.....	109,260	21,155	5,855,377	37,053,513	349 13
1862.....	138,138	21,151	5,552,300	37,139,845	263 79
1864.....	169,353	37,888,033	11,584,759	48,733,783	287 75
1865.....	173,493	44,064,499	20,644,678	64,709,177	362 55
1866.....	200,418	66,495,116	19,458,134	55,953,260	428 57

That Chicago has been gradually growing wealthier, and year by year more able to bear taxation, the above table fully illustrates. In 1850 the valuation was \$240 97, and the taxes 84 cents per capita, or 35 cents on each \$100. By 1860 the valuation had increased to \$349 13, and the taxes 84 cents per capita, or \$1 01 on each \$100. The first years of the late war materially affected the value of property, but in 1864 a reaction was evidenced which continued upward through the next two years, bringing the per capita valuation from \$268 79, as it was in 1862 to \$287 75 in 1864, \$362 55 in 1865, and \$428.57 in 1866. The rate of taxation in 1864, '65 and '66 was \$2 on the \$100, but owing to the movement in population and property, the tax averaged in 1864 \$5 75; in 1865, \$7 25; and in 1866, \$8 57 per capita. The taxes here spoken of are municipal or city taxes purely. The State taxes for 1866 amounted to \$1 28 per capita, and the county taxes (though we have no means at hand to certify our estimate) may be stated at a like rate. These added to the city taxes, will make a total of taxation levied for domestic purposes on the people of Chicago of \$11.13 per capita. And as a matter of course the people bear their share of Federal taxation and customs. In the 1st district of Illinois, which covers Cook County, in which Chicago is loca

ted, there was collected on account of internal revenue for the year 1865-66, the sum of \$6,872,286, from the following sources :

Manufactures and productions.....	\$3,302,163	Licenses	\$515,103
Slaughtered animals.....	69,943	Income.....	1,730,760
Gross receipts.....	847,523	Legacies and successions.....	7,180
Sales.....	11,301	Passports, &c	295
Articles in schedule A.....	16,863	Penalties, &c	71,849

The population of the county in that year may be estimated at 220,000 persons, and hence the federal taxes averaged about \$33 to each inhabitant.

The customs collected in the United States in the same year amounted to \$179,000,000 in gold. The population of the United States in that year was not far from 35,000,000. This gives about \$5 per capita. All these taxes added, viz. : domestic \$11 13, United States internal \$33, and United States customs \$5—make a total of \$49 13 per capita paid by the people of Chicago. Omitting customs, the internal taxes paid are about \$44 per capita.

COMMERCIAL LAW.—No. 34.

FIRE INSURANCE (CONTINUED).

(Continued from page 472, vol. 56.)

OF THE RISK INCURRED BY THE INSURERS.

At the time of the insurance, the property must be in existence, and not on fire, and not at that moment exposed to a dangerous fire in the immediate neighborhood; because the insurance assumes that no unusual risk exists at that time.

The risk taken is that of fire. And therefore the insurers are not chargeable if the property be destroyed or injured by the indirect effect of excessive heat; or by any effect which stops short of ignition or combustion. But if there be actual ignition, the insurers are liable for the immediate consequences; as the injury from water used to extinguish the fire. Or injury to or loss of goods caused by their removal from immediate danger of fire, even if it be reasonable, and not if the loss or injury might have been avoided by even so much care as is usually given in times of so much excitement and confusion.

In some instances the policies require that the insured should use all possible diligence to preserve their goods; and such a clause would strengthen the claim for injury caused by an endeavor to save them by removal. So the insurers are liable for injury or loss sustained by the blowing up of buildings to arrest the progress of a fire. But we should say, that if goods were damaged by water thrown on to extinguish a supposed fire when there was none in fact, or by the wholly unnecessary and useless destruction of a house distant from the fire, the insurers should not be held.

It must now be conceded to modern science, that lightning is not fire; and if property be destroyed by lightning, the insurers are not liable, un-

less there was also ignition ; or unless the policy expressly insures against lightning.

An explosion caused by gunpowder is a loss by fire ; not so, it is said, is an explosion caused by steam. Scientifically, it might be difficult to draw a wide distinction between these cases ; but the difference seems to be sufficient for the law.

Whether when the negligence of the insured or his servants is to be considered as the sole or direct cause of the fire or loss, the insurers can be held, has been somewhat considered. And as this is the most common and universal danger, and the very one which induces most persons to insure, there has been some disposition to say that no measure or kind of mere negligence can operate as a defence. And in effect this is almost the law. But if the loss be caused by negligence of the insured himself, of so extreme and gross a character that it is hardly possible to avoid the conclusion of fraud, the defence might be a good one, although there were no direct proof of fraud. That the fire was caused by the insanity of the insured should be no defence.

In Beaumont's work on Fire and Life Insurance in England, he gives some instances drawn from the practice of English insurance companies, a part of which, at least, rest upon sound principles, and illustrate what is probably the law, although not yet determined by adjudication. Thus, if implements or apparatus used for fire, as ranges, grates, or the like, are destroyed by fire, this loss gives no claim on the insurers. But if the chimney or other parts of the house in which the apparatus is set are injured by the same fire, for this the insurers are liable. He says, also, that where the loss is caused only by an excess of the heat or fire which was designedly used, they are not liable. But we should have some doubt as to this rule ; especially as applied to clothes hung up to dry, and catching fire from the flame, and the like. Nor are we satisfied that, if a haymow takes fire by its own fermentation, it is not a loss within the policy. If quicklime be so heated by water as to set on fire the barrels or other wood near it, it may be said that the lime itself is not burnt, and might not be hurt by being burnt, and, if destroyed by water, is not a loss within the policy ; but we do not think this would be reasonable. And if lime be put in a building, and, by being partially wet and heated, set fire to it, and for the purpose of extinguishing this fire, water is so used as to slack the lime and render it valueless, it would be a loss within the policy, unless we say that no loss gives a claim if the thing destroyed contribute to the loss, proximately or remotely. We are aware of no such rule. Thus, if cotton, by fermentation, ignited and set fire to a mill, undoubtedly the loss of the mill would be within the policy, and so would be the loss of other and disconnected cotton. And perhaps we might say that the loss of the very cotton of which the spontaneous combustion caused the fire should be within the policy.

There are various exceptions in the policies used in this country ; but they have not given rise to much adjudication, and do not generally need explanation. It may be remarked, that the exception of "military or usurped power," or any similar phrase, would not be extended so as to cover a common mob. But if the word "riot" be used, insurers are not liable for a fire caused by a tumultuous assemblage, whatever may have been the original purpose of the meeting.

If the insured be charged with burning the property insured himself, it has been held in England, that this defence could be supported only by evidence which would suffice to convict the plaintiff, if tried upon an indictment. But in this country it has been ruled otherwise.

OF VALUATION.

Valuation, precisely as it is understood in a marine policy, seldom enters into a fire policy—never, perhaps, in a policy made by any of those mutual companies, who now do a very large part of the insurance of this country. And quite seldom is a building valued when insured by a stock company. If a loss happens, whether it be total or partial, the insurers are bound to pay only so much of the sum insured as will indemnify the assured. But as care is always taken—and sometimes required by law—not to insure upon any house its whole value, it seldom happens, and if the proper previous precautions are taken, should never happen, that any question of value arises in a case of total destruction of a building by fire.

But mutual companies are usually forbidden by their charter to insure more than a certain proportion of the value of a building; and this requires a valuation in the policy, which is conclusive, for some purposes, against both parties. Of course the insurers can never be held to pay more than the sum insured. And if their charter or by-laws permit a company to insure only a certain proportion of the value, as three fourths—on the one hand, if the company insure more than that proportion, as \$3,500 on property valued at \$4,000, they are held to pay only \$3,000, and the assured cannot show that the building was really worth more than \$4,000; and, on the other hand, the valuation, if not fraudulent, is conclusive against the insurers if the building is destroyed, and they cannot show, in defence, that the building was worth less.

We know nothing to prevent the parties from making a valued policy, if they see fit to do so, although this has been questioned. It is not uncommon for companies who insure chattels, as plate, pictures, statuary, books, or the like, to agree on what shall be the value in case of loss.

Sometimes the policy reserves to the insurers the right to have the valuation made anew by evidence, in case of loss. Then if a jury find a less valuation, the insurers pay the same proportion of the new value which they had insured of the new valuation.

The value which the insurers on goods must pay, is their value at the time of the loss. And it has been held, that a fair sale at auction, with due precaution, will be taken to settle that value after the fire, provided the insurers have reasonable notice or knowledge that the auction is to take place.

The valuation determines the amount which the insurers must pay only in case of total destruction. If the building is only injured by fire, the insurers may either repair it, or pay the cost of repairing it.

OF ALIENATION.

Policies against fire are personal contracts between the insured and the insurers, and do not pass to any other party without the express consent of the insurers.

It is essential to the validity and efficacy of this contract that the insured have an interest in the property when he is insured, and also when the loss takes place; for otherwise it is not his loss, and he can have no claim for indemnity. If, therefore, he alienates the whole of his interest in the property before the loss, he has no claim; and if he alienates a part, retaining a partial interest, he has only a partial and proportionate claim.

After a loss has occurred, the right of the insured to indemnity is vested and fixed; and this right may be assigned for value, so as to give an equitable claim to the assignee, without the consent of the insurers. But we should not consider a mere assignment or conveyance of the premises as of itself an assignment of the right to recover on a policy of insurance for a previous loss, unless something in the contract, either of word or fact, showed clearly that this was intended by the parties.

Policies against fire contain a provision, that an assignment of the property, or of the policy, shall avoid the policy. So, generally, it is hardly worth while to inquire what right an assignee, without consent, would acquire at common law, or in equity, where there is no such provision. We think, however, that the weight of authority is strongly, though not conclusively, against his acquiring any claim. There seems to be some difference between fire policies and marine policies on this subject, the necessity of consent being held more strongly in the case of fire policies; but it is not easy to see a very good reason for this difference.

Nothing is properly an alienation of the property, which is less than an absolute conveyance of the title thereto. It has been held, that a sale by one joint owner of his interest in the property to the other, does not avoid the policy. But the weight of authority is, that generally such sale avoids the policy. An assignment by one partner of his interest in the partnership property to the other, is held to prevent a recovery in case of loss. But a dissolution of the partnership before loss, and a division of the goods, so that each partner owned distinct portions, was held to be in violation of a condition against "any transfer or change of title in the property insured."

Where an insured conveyed half the premises in fee, taking back a lease of the same for five years at a nominal rent, and agreeing to keep and leave the premises in repair, it was held to be an alienation, although the insured would have been bound, as lessee, to rebuild. Where the insured mortgaged the premises and assigned the policy to the mortgagee, with the consent of the insurer, and afterwards conveyed the premises away, it was held that the policy remained valid as to the mortgagee, and for the amount of the debt, on the ground that the insured could do nothing to affect the rights of the assignee without his consent. In this case it was also held, that payment of an assessment after the property is burned does not remove the effect of an alienation.

A conveyance by one insured intended to secure a debt, will be treated in a court of equity as a mortgage, and therefore it does not terminate the interest of the insured. A contract to convey is not an alienation. Nor is a conditional sale, where the condition must precede the sale, and is not yet performed. Nor is a mortgage, not even after breach, and perhaps entry for a breach, and not until foreclosure. Nor selling and immediately taking back. But bankruptcy is said to be an alienation; and if there were a voluntary assignment by one insured to his assignee in trust,

it should operate so, as much as a direct transfer to creditors. There are reasons, however, for drawing a distinction between such a case, and one where the law takes possession of property insured for creditors; at least, we should say that, in such case, the insurance might remain valid until the assignees or commissioners sold the property. If several estates are insured in one policy, and one or more are aliened (or conveyed away), the policy is void as to those only which are aliened. If many owners are insured in one policy, a transfer by one or more to strangers, without the act or concurrence of the other owners, will avoid the policy for only so much as is thus transferred.

Policies of insurance are not negotiable—that is, not assignable in such way as to give to the assignee a right of action in his own name—in most of our States. But the moral or equitable interest of the transferee will sustain a promise by the insurers to him, and if such express promise be made, on this he may bring his action. If he brings it in the name of the assignor, it must, generally at least, be subject to all the defences which the insurers could make against the assignor. It is possible that there should be some qualification of this rule. Undoubtedly, no insured party can make a transfer which shall operate injuriously on the insurers, and yet preserve the rights so transferred. On the other hand, if he, by the terms of the policy, may transfer it with the consent of the insurers, and after such transfer and consent the originally insured fraudulently burns the building, there would be strong reasons for holding the insurance still valid, in favor of the innocent transferee. Perhaps the question would turn upon this: Did the transferee pay, or assume the obligation of paying, or guarantee the payment, of any premiums? If so, he should be held insured, although the terms of the policy and transfer might oblige him to bring his action in the name of the incendiary. Where possible, such transfer, with such consent, would undoubtedly be regarded by the courts as a new and independent contract with the transferee.

An alienation, or even actual surrender of the policy, does not avoid the premium note, or the obligation of the insured to pay his share of the previous losses. If, therefore, after an alienation, the insurers, with full knowledge of it, demand and receive from the insured payments on such account, it is no waiver of the forfeiture of the policy caused by the alienation. From some cases it would seem that, if the insurers called for and received payments accruing subsequently, it would not revive their obligation, on the ground that the policy is so completely annulled by the alienation, that it cannot be revived by any waiver. But we should have much doubt of this. If the insurers expressly waived the forfeiture, it would make them responsible to the transferee.

In practice, care should be taken to have all such transfers regularly made and notified, and the consent obtained fully authorized, and duly indorsed or certified, and all the rules or usages of the insurers in this respect complied with.

Where one insured against fire recovered of his insurers for a loss caused by a railroad company for which the railroad company was liable to the insured, it was held that this operated as an equitable assignment to the insurers of the claims of the insured against the railroad company; and the insurers might enforce this by a suit in the name of the insured.

OF NOTICE AND PROOF.

Where the policy requires a certificate of the loss, the production of it is a condition precedent to any claim for payment. And it must be such a certificate as is required; but a substantial compliance with its requirements is sufficient. So, too, if the notice is to be given forthwith, there must be no unreasonable or unnecessary delay. And all the circumstances of the case are considered, in determining whether there was or was not due diligence. A notice of a loss, which was required by the policy to be given "forthwith," and was in fact given thirty-eight days after a loss, has been held insufficient. But circumstances may justify a longer delay. Where a certificate is required to be furnished "as soon as possible," it is still sufficient if it be furnished within a reasonable time. But where the fire took place in November, and the account of loss was not furnished till the March following, it was held not to be a compliance with the conditions. Generally, this is a question for the jury.

In fire policies, as the premises may be supposed always open to the inspection of the agents of the insurers, a general notice of the fire will probably be enough.

If the assured has assigned the policy with consent, the assignee may give the notice; and if he does, the neglect of the original insured to give notice does not prejudice the assignee.

The insurers may waive their right of notice wholly or partially. And they may do this expressly, or by any acts which fairly indicate to the insured that they accept an imperfect notice given to them, or that they do not need and do not require that any notice should be given, or that they have taken the matter into their own hands, and have made inquiries, and obtained all the information possible. And a refusal "to settle the claim in any way," has been held to supply a good excuse for not offering notice.

The preliminary proofs, by which is meant affidavits, certificates, statements, etc., setting forth the loss and its circumstances, though required by the policy, are not admissible as evidence as to the damages or amount of claim. If it were provided in the policy that they might be so used, this would make them evidence, but we are not aware that this is ever said expressly, and it cannot be inferred from the mere requirement of them.

If the policy provide that the assured shall, if required, submit to an examination under oath, the insurers are not bound by his statement under oath; but if he be duly required, and therefore submit himself to an examination under oath, he cannot afterwards be required to submit to further examination under oath.

OF ADJUSTMENT AND LOSS.

Insurers against fire are not held to pay for loss of profits, gains of business, or other indirect and remote consequences of a loss by fire. We do not know, however, why profits may not be specifically insured against fire, where it is not forbidden by, or inconsistent with, the charter of the insurers.

There is one wide difference between the principle of adjustment of a marine policy and of a fire policy. In the former, if a proportion only of the value is insured, the insured is considered as his own insurer for the residue, and only an equal proportion of the loss is paid. Thus if, on a ship valued at \$10,000, \$5,000 be insured, and there is a loss of one-half, the insurers pay only one-half of the sum they insure, just as if some other insurer had insured the other \$5,000. But in a fire policy, the insurers pay in all cases the whole amount which is lost by fire, provided only that it does not exceed the amount which they insure.

It is said that general average clauses or provisions are inserted in fire policies in England; but they are not known here. Still, in one case, the principle of general average was partially applied. Blankets were used by the insured, with the consent of the insurers, to protect a building from a near fire; they did this effectually, but were themselves made worthless, and an action of the insured against the insurers for this loss was sustained by the court. But the owners of other buildings in the neighborhood, who might have been protected by the use of the blankets, were thought to be too remotely interested to be liable to contribution.

As a contract of fire insurance is an entire one, if the policy ever attaches, there should be no return of premium, although the property be destroyed the day after, and not by fire; as by demolition by whirlwind, or other similar accident. If, however, there were an insurance on goods believed to be at a certain place, at a certain time, and none of them were there, there might be an entire return of premium, because there was never any insurance. But if a part were there, there should be no partial return; because the rule that, where a part only is insured, only a proportionate part is paid by the insurers in case of loss, applies only to marine policies, as stated above.

Most of the fire policies used in this country give the insurers the right of rebuilding or repairing premises destroyed or injured by fire, instead of paying the amount of the loss. If, under this power, the insurers rebuild the house insured, at a less cost than the amount they insure, this does not exhaust their liability; they are now insurers of the new building for the difference between its cost and the amount they have insured. And if the new building burns down, or is injured while the policy continues, the insurer may claim so much as, added to the cost already incurred, shall equal the sum for which he was insured.

It may be important to add that, under our common mutual policies, the insured will also be liable for assessments for losses after the destruction of the building by fire, during the whole term of the policy.

There is no rule in fire insurance similar to that which makes a deduction, in marine insurance, of one-third, new for old. Still the jury, to whom the whole question of damages is given, are to inquire into the greater value of a proposed new building, or of a repaired building, and assess only such damages as shall give the insured complete indemnity.

Where insurers had reserved a right to replace articles destroyed, and the insured refused to permit them to examine and inventory the goods that they might judge what it was expedient for them to do, Chancellor Walworth refused to aid the insurers in a court of equity; but such con-

duct on the part of the insured would be evidence to the jury of great weight to prove an overstatement of loss.

If, after the adjustment and payment, there appears to have been fraud in the original contract, or in the adjustment, or material mistake of fact, it would seem that money paid may be recovered back; but not so if the mistake be of law.

If the policy contains a provision that any fraud in the claim, or any false swearing or affirmation in support of it, shall avoid the policy (as is frequently the case in England), it would seem that it would be left to the jury to say whether there was any material and substantial fraud connected with the matter, and if so, to find for the insurers.

From the present state of the authorities, it may be stated, as a general rule, that the law allows no claim upon the proceeds of policies of fire insurance in favor of any third parties, unless there be a bargain or contract, or a trust, to that effect. Thus, a tenant cannot compel his landlord to expend money received from an insurance office, on the demised premises being burnt down, for rebuilding them, nor prevent the landlord from suing for the rent until the premises are rebuilt, if, by the terms of the lease rent is due although the building is burned.

(To be Continued.)

TOLEDO, WABASH AND WESTERN RAILROAD.

The Toledo, Wabash and Western Railway Company is a consolidation of the Toledo and Wabash, the Great Western of 1859, the Quincy and Toledo, and the Illinois and Southern Iowa Companies—these organizations being merged into one by articles of consolidation duly ratified and confirmed July 1, 1865. In pursuance of this consolidation the present company is now operating a great, direct through line of railway, commencing at Toledo, Ohio, and terminating at Quincy, Ill., and Keokuk, Iowa, with a branch running to Naples, on the Illinois River, making the entire length of road (including 22 miles [leased] of the Chicago, Burlington and Quincy Railroad) about 520.6 miles. Of the main line 75.5 miles are in Ohio, 166.9 miles in Indiana, and 211 miles in Illinois. The Keokuk Branch has a length of 41.2 miles, and the Naples Branch a length of 4.0 miles. Total length owned by the company 498.6 miles. The share capital of the company now amounts to \$6,700,000, as follows:

General stock—57,000 shares.....	\$5,700,000
Preferred stock—10,000 shares.....	1,000,000
Total share capital	\$6,700,000

Below we give a statement of the funded debt of the consolidated company, showing a total of \$13,800,000:

	Bonds.	Interest.	Due.	
7 p. c. 1st mort.,	(ToL. & Ill. RR., 75.5 m.).....	Feb. & Aug.	1864.....	\$900,000
7	do (L. E. W. & St. L. RR., 166.9 m.)..	do	1860.....	2,500,000
7	do (St. W. RR., E. Div., 81.0 m.)..	do	1865.....	45,000
10	do (do W. Div. 100.0 m.).....	Apr. & Oct.	1869.....	1,000,000
7	do (St. W. RR. of '69, 181.0 m.)..	Feb. & Aug.	1869.....	1,485,000
7	do (C. & Tol. RR., 34.0 m.).....	do	1860.....	500,000
7	do (Ill. & So. Iowa RR., 41.2 m.)..	do	1869.....	800,000
7 p. c. 2d mort.,	(ToL. & W. RR., 75.5 m.).....	May & Nov.	1876.....	1,000,000
7	do (Wab. & W. RR., 166.9 m.)..	do	1879.....	1,500,000
7	do (St. W. RR. of '69, 181.0 m.)..	do	1869.....	2,500,000
7 p. c. Equipm't,	(ToL. & W. Rwy., 242.4 m.)..	Apr. & Oct.	1863.....	600,000
7 p. c. S'g fund. (T., Wa. & W. Rwy., 498.6 m.)..	do		1871.....	1,000,000

Total funded debt on 498.6 miles of road..... \$13,800,000

With the exception of \$1,000,000, the bonds named in the above list cover only sections of the present road; and it being deemed for the interest of all parties that these various classes issued by and bearing the titles of the several corporations now represented by this company, shall be consolidated into one and the same mortgage debt, the Board of Directors have decided to create and issue its coupon bonds, entitled "Consolidated Mortgage Sinking Fund Convertible Bonds," of sufficient amount and for the purpose of retiring all of these outstanding securities. To secure the payment of the principal and interest it is proposed that a mortgage shall be executed, covering the entire real and personal property of the company from Toledo to the Mississippi, to constitute the first mortgage lien upon the consolidated property of the Company. For the purpose of giving these consolidated bonds a special advantage and value, the mortgage securing them will not only embrace the entire amount of property pledged for the old bonds, but a large and valuable amount heretofore entirely free and unincumbered, besides original liens upon important contracts, accessions and franchises more recently acquired. The time and conditions for the exchange of these bonds will soon be made known.

The gross earnings of the road for the half fiscal year ending December 31, 1865, and for the full year 1866, together with the operating expenses during the two periods, are presented in the annexed statement, viz.:

	July to Dec. 1865	Jan. to Dec. 1866
Passenger transportation.....	\$896,962 08	\$1,333,846 78
Freight	1,080,268 88	1,509,437 85
Mail	32,000 00	52,000 00
Express	49,043 10	93,845 17
Miscellaneous	40,946 56	84,786 92
Gross earnings.....	\$2,083,199 15	\$2,517,836 23
Roadway—renewals	\$109,017 80	\$341,051 79
—maintenance	338,084 86	634,068 25
Cars, engines, &c.—maint'ce.....	276,537 13	556,905 78
General expn's transp't'n &c.....	763,553 98	1,369,463 68
	—1,487,193 76	—2,511,186 50
Residuary income	\$545,670 86	\$906,199 73

The revenues of the company have been very seriously impaired in consequence of the disasters to the wheat crop during the past two years throughout the entire extent of country traversed by the road. In evidence of the nature and extent of this loss, it may be stated that the falling off in the tonnage of wheat and flour during the 18 months covering the company's report, as compared with the same period of previous years, is equal to 1,500,000 bushels, the earnings upon which would have been \$660,000. It is to this unlooked for misfortune the directors attribute their inability to declare satisfactory dividends on capital. The increase in each and all other branches of traffic upon the road as compared with previous years has been marked and encouraging. The coal and lumber business especially indicate a remarkable growth and promise to become the most permanent and productive sources of revenue.

The company have eleven engine houses and 102 stations on the line of their road. The equipment now consists of 102 locomotives, 47 passenger cars, 1,040 box freight cars, 27 mail and baggage cars, 275 stock cars, 200 platform cars, and 150 coal cars. The whole number of passengers carried in the six months of 1865 was 366,525, and in the year 1866,

624,378. The amount of freight carried in the two periods was as follows:

	July-December, 1865.			Jan.-December, 1866.		
	East'w'd.	West'w'd.	Total.	East'w'd.	West'w'd.	Total.
Grain.....bushels	1,070,198	124,883	1,225,886	8,910,711	894,713	4,304,284
Cattle.....cars	8,000	75	8,075	7,245	189	7,334
Hogs.....cars	969	148	1,112	2,972	393	3,370
Lumber.....1,000 feet	3,969	16,535	21,505	4,615	23,591	28,206
Sundries.....tons	47,657	79,314	117,971	180,284	141,075	261,359
Freight earnings.....	\$329,075	\$491,121	\$1,020,196	\$1,299,124	\$910,308	\$2,209,432

The Income account, showing the residuary balances for the eighteen months since consolidation and other receipts as per Treasurer's books, and the disbursements on account of renewals, construction, equipment &c., charged thereon, supplies the following summary:

DEBTOR.		CREDITOR.	
Locomotives, cars, tools, &c.....	\$337,541 10	Balance Dec. 31, 1865.....	\$545,670 89
Construction.....	316,433 00	" " 1866.....	906,199 72
Interest account.....	1,836,130 37	Supplies from old comp'ies.....	102,648 64
Profit & Loss—Discount, &c.....	201,841 83	Sinking Fund Bonds.....	1,000,000 00
Tol. Wab. & Western R. Co.....	17,016 63		
Ill. & So. Iowa, R.R. Co.....	129,807 07	Surplus income.....	\$2,584,419 5
Total.....	\$2,360,820 25		278,559 00
		Total.....	\$2,360,820 25

The Treasurer's General Balance Sheet of December 31, 1866, reads as follows:

DEBTOR.		CREDITOR.	
Railway & equipment.....	\$19,850,000 00	Capital Stock.....	\$6,700,000 00
Trustees.....	1,195,000 00	Funded Debt.....	13,300,000 00
Materials & fuel on hand.....	303,014 07	Coupons of 1865 & 1866.....	42,284 75
U. S. Post office, &c.....	80,809 31	Balance of Income acc't.....	278,559 00
Wabash Elevator Stock.....	10,000 00	Cash and Bank account.....	71,790 53
Sundries.....	94,776 32	Treasurer's Equalization account.....	665,728 19
Equalization account.....	700,300 27	Bills payable.....	15,500 00
Total.....	\$22,113,900 47	Total.....	\$22,113,900 47

The general account current (covering the whole period since the consolidation) shows the amount of money received from all sources, and what disposition was made of the same, as follows:

RECEIPTS.		DISBURSEMENTS.	
Net earnings (6 mos.) 1865.....	\$545,670 89	Equipment.....	\$337,541 10
do (12 mos.) 1866.....	906,199 72	Construction.....	316,433 00
Sinking fund, bonds issued.....	1,000,000 00	Interest on bonds, &c.....	1,836,130 37
Trans. on equalizat'n ac't.....	665,728 19	Ill. & Southern Iowa R.R.....	129,807 27
Bills payable.....	15,500 00	Discount on bonds, &c.....	201,841 83
Bank ac't (overdrafts).....	\$71,790 53	Equalization account.....	700,300 24
Less dues from U. S., &c.....	55,536 13—	Advanced for wood and supplies.....	200,465 43
	16,204 40	Toledo & Wabash R.R. Co.....	17,016 63
Total.....	\$2,149,301 20	Wabash Elevator stock.....	10,000 00
		Total.....	\$2,149,301 20

It will be seen from this statement that the company, after promptly paying the interest upon each and every class of its funded obligations, including the dividends upon its preferred stock, closes with the year in a sound financial condition, and without any floating debt or outstanding liability whatever.

The monthly range of prices at which the stocks of the consolidated com-

panies sold at New York in the year 1866 are given in the following statement:

	General.	Preferred.		General.	Preferred.
January	42 @43	.....@.....	July.....	35 @40	61 @61
February	31 @40	.....@.....	August.....	39 @47½	67½ @70
March.....	31½ @33	.....@.....	September.....	43½ @46½	71 @73½
April.....	32 @39	68 @68	October.....	44 @45	72 @75
May.....	33½ @37½	.....@.....	November.....	46 @54½	73 @75½
June.....	35 @36	.....@.....	December.....	40½ @45½@.....

—range during the year—general 31@55, and preferred 61@75½. On the 1st of June current the closing quotations were—general 41½, and preferred 62.

RAILWAY EXTENSION AND ITS RESULTS.

BY R. DUDLEY BAXTER, M.A.*

I.—INTRODUCTION.

If a Roman emperor, in the most prosperous age of the empire, had commanded a history to be written of that wonderful system of roads which consolidated the Roman power, and carried her laws and customs to the boundaries of the accessible world, it would have afforded a just subject for national pride. The invention and perfecting of the art of road making, its sagacious adoption by the State, its engineering triumphs, its splendid roads through Italy, through Gaul, through Spain, through Britain, through Germany, through Macedonia, through Asia Minor, through the chief Islands of the Mediterranean, and through Northern Africa; all these would have been recounted as proofs of Roman energy and magnificence, and as introducing a new instrument of civilization, and creating a new epoch in the history of mankind.

A similar triumph may fairly be claimed by Great Britain. The Romans were the great Road-makers of the ancient world—the English are the great Railroad-makers of the modern world. The tramway was an English invention, the locomotive was the production of English genius, and the first railways were constructed and carried to success in England. We have covered with railroads the fairest districts of the United Kingdom, and developed railways in our colonies of Canada and India. But we have done much more than this, we have introduced them into almost every civilized country. Belgian railways were planned by George Stephenson. The great French system received an important impulse from Locke. In Holland, in Italy, in Spain, in Portugal, in Norway, in Denmark, in Russia, in Egypt, in Turkey, in Asia Minor, in Algeria, in the West Indies, and in South America Englishmen have led the way in railway enterprise and construction. To this day, wherever an undertaking of more than ordinary difficulty presents itself, the aid is invoked of English engineers, English contractors, English navvies, and English shareholders; and a large portion of the rails with which the line is laid, and the engines and rolling stock with which it is worked are brought from England.

* Read before the Statistical Society of London November, 1866

To Englishmen the annals of railways must always be of the highest interest, and I trust that the brief inquiry upon which I am about to enter will not be deemed a waste of labor. I propose to examine into the extension of railways at home and abroad; to show the rate at which it is proceeding; the expenditure which it has cost; and its vast commercial results. The practical questions will follow whether the construction of Railways in the United Kingdom has reached its proper limit? Are we over-railroaded, as some assert, so that railways ought to be discouraged? Or are we under-railroaded, so that fresh railways ought to be invited? Are other nations passing us in the race of railway development? And, lastly, can any improvement be introduced into our railway legislation?

II.—RAILWAYS IN THE UNITED KINGDOM.

So far as roads are concerned, the dark ages may be said to have lasted from the evacuation of Britain by the Romans in 448, to the beginning of the last century. During the whole of that period nothing could be more barbarous or impassable than English highways. The Scotch rebellions first drew attention to the necessity of good roads. The first step was to establish turnpikes, with their attendant waggons and stagecoaches; superseding the long strings of packhorses which, up to that time, had been the principal means of transport. The second step was to render navigable the rivers which passed through the chief seats of industry. The third, which commenced later in the century, was to imitate the rivers by canals, and to construct through the north and centre of England a net work of 2,600 miles of water communication, at an outlay of £50,000,000 sterling. But roads and canals combined were insufficient for the trade of Lancashire and Yorkshire, and bitter complaints were made of expense and delay in the transmission of their goods.

The desired improvement came from the mining districts. Since the year 1700 it had been the custom to use wooden rails for the passage of the trucks. About the year 1800 Mr. Outram, in Derbyshire, laid down iron rails upon stone sleepers, and the roads so constructed took from him the name of Outram's Ways or Tramways. About the year 1814, the ingenuity of mining engineers developed the stationary steam-engine into a rude locomotive, capable of drawing heavy loads at the rate of four or five miles an hour. It was proposed to construct a public railway on this principle between Stockton and Darlington. After much delay the line was opened by George Stephenson in 1825, and the experiment was successful as a goods line—unsuccessful, from its slowness, as a passenger line. The next experiment was the Manchester and Liverpool Railway, projected as a goods line to accommodate the increasing trade of those two places, which was crippled by the high rates of the canal and navigation. Before the railway was completed, another great improvement had taken place in the construction of locomotives by the discovery of the multitubular boiler, which immensely increased the volume of steam, and the speed attainable.

The opening of the Manchester and Liverpool Railway on 15th September, 1825, was the formal commencement of the railway era. On that day the public saw for the first time immense trains of carriages loaded,

with passengers, conveyed at a rate of more than fifteen miles an hour, a speed which was largely exceeded in subsequent trials. The desideratum was at length obtained, viz., the conveyance of large masses of passengers and goods with ease and rapidity; and it was seen that the discovery must revolutionize the whole system of inland communication.

The public feeling was strangely excited. Commercial men and men of enterprise were enthusiastic in favor of the new railways and eager for their introduction all over the country. But the vested interests of roads and canals, and landed proprietors who feared that their estates would be injured, together with the great body of the public, were violently prejudiced against them. Railways had to fight their way against the most strenuous opposition. I quote from the "Life of Robert Stephenson," the engineer of the London and Birmingham line:

"In every parish through which Robert Stephenson passed, he was eyed with suspicion by the inhabitants, and not seldom menaced by violence. The aristocracy regarded the irruption as an interference with territorial rights. The humbler classes were not less exasperated, as they feared the railway movement would injure those industrial interests by which they lived. In London, journalists and pamphleteers distributed criticisms which were manifestly absurd, and prophecies which time has signally falsified."—Vol. i, p. 169.

The city of Northampton was so vehement in its opposition, that the line was diverted to a distance of five miles, through the Kilsby Tunnel, to the permanent injury both of the city and railway. The bill was thrown out in Parliament, and only passed in the following session by the most lavish expenditure in buying off opposition.

Other lines were soon obtained in spite of the same vehement hostility. The Grand Junction Railway from Liverpool to Birmingham, was passed in 1833. The Eastern Counties Railway was sanctioned in 1834. It was launched as a 15 per cent. line. It is said that a wealthy banker in the eastern counties made a will, leaving considerable property to trustees to be expended in parliamentary opposition to railways. The Great Western was thrown out in 1834, but passed in 1835. The London and Southampton, now the London and South Western, was proposed in 1832, but was not sanctioned till 1834.

In 1836 came the first railway mania. Up to this time the difficulty had been to pass any bill at all, now competing schemes began to be brought before Parliament. Brighton was fought for by no less than five companies, at the total expenditure of £200,000. The South Eastern obtained its act after a severe contest with the Mid Kent and Central Kent. Twenty-nine bills were passed by Parliament authorising the construction of 994 miles of railway. In the autumn the mania raged with the greatest violence. "There is scarcely," said the Edinburgh Review, "a practicable line between two considerable places, however remote, that has not been occupied by a company; frequently two, three or four rival lines have started simultaneously." The winter brought a crash, and the shares of the best companies became almost unsaleable.

In 1845 most of the great lines had proved a success. The London and Birmingham was paying 10 per cent., the Grand Junction 11 per cent., the Stockton and Darlington 15 per cent., and railway shares were on an average at 100 per cent. premium. The railway mania broke out

with redoubled violence; railways appeared an El Dorado. The number of miles then open was 2,148. The number of miles sanctioned by Parliament in the three following sessions was :

1845.....	2,700
1846.....	4,538
1847.....	1,554
Total	<u>8,592</u>

Had all these lines been constructed, we should have had in 1853 more than 10,700 miles of railway, a number which was not actually reached till 1861, or nine years later. But the collapse in 1846 was so severe that an act was passed for the purpose of facilitating the dissolution of companies, and a large number of lines were abandoned, amounting, it is said, to 2,800 miles.

Railway extension was now menaced with a new danger. The effect of the panic was so great, and the losses on shares so severe, that the confidence of the public was destroyed. Besides this, as the new lines were opened, the dividends gradually decreased till the percentage of profit on capital had gone down from $5\frac{1}{2}$ per cent. in 1845 to $3\frac{1}{2}$ in 1849 and $3\frac{1}{2}$ in 1850, leaving scarcely anything for ordinary shareholders. As a consequence, shareholders' lines were at an end. But since 1846 a new custom had been gaining ground of the amalgamation of smaller into larger companies. I may instance the North Eastern Company, which consists of twenty-five originally independent railways. In this manner eleven powerful companies had been formed, which divided the greater part of England between them. The competition between these companies for the possession of the country was very great, and by amalgamations, leases, guarantees, and preference stocks, they financed a large number of lines which otherwise could not be made. In this manner the construction of railways between 1850 and 1858 progressed at the rate of nearly 400 miles a year.

But towards the end of 1858 the great companies had exhausted their funds and ardor, and proposed terms of peace. The technical phrase was "that the companies required rest." Again it seemed probable that railway extension would be checked. But a new state of things arose. Twenty years of railway construction had brought forward many great contractors, who made a business of financing and carrying through lines which they thought profitable. The system had grown up gradually under the wing of the companies, and it now came to the front, aided by a great improvement in the value of railway property, on which the percentage of profits to capital expended had gradually risen from $3\frac{1}{2}$ per cent. in 1850 to $4\frac{1}{2}$ in 1860. The companies also found it their interest to make quiet extensions when required by the traffic of the country. Thus railway construction was continued in the accelerated ratio of more than 500 miles a year. The following table gives a summary of the rate of progress from 1845 to 1865:—

UNITED KINGDOM—MILES CONSTRUCTED.

Year.	Miles Opened.	Average Number Opened per An.
1834.....about	200	133
1840....."	1,200	240
1845.....	2,440	312
1850.....	6,500	347
1855.....	8,335	425
1860.....	10,434	571
1865.....	13,289	

During the same year the percentage of profits to capital expended were as follows:—

	Per cent.		Per cent.
1845.....	5.48	1860.....	4.29
1850.....	3.31	1865.....	4.46
1855.....	3.90		

The latter table, which is abridged from an annual statement in *Herepath's Journal*, scarcely gives an idea of the gradual manner in which the dividends sank from their highest point in 1845 to their lowest in 1850, and of their equally gradual recovery from 1850 to 1860 and 1865. The main results of the two tables are, first, the close connection between the profit of one period and the average number of miles constructed in the next five years, and, second, the fact that the construction of railways in the United Kingdom has been steadily increasing since 1855, and is now more than 500 miles per annum.

The number of miles authorized by Parliament during the last six years is stated in the *Railway Times* to be as follows:—

Year.	Miles.	Year.	Miles.
1861.....	1,332	1864.....	1,329
1862.....	809	1865.....	1,996
1863.....	795	1866.....	1,662
			7,328
Average.....			1,220

Hence the miles authorized by Parliament for the last six years have been double the number constructed; and there must be about 3,500 miles not begun or not completed—a number sufficient to occupy us for fully seven years, at our present rate of construction.

Such is a brief summary of the history of railway extension in Great Britain and Ireland. It may be thrown into five periods:—

1. The period of experiment, from 1820 to 1830.
2. The period of infancy, from 1830 to 1845.
3. The period of mania, from 1845 to 1848.
4. The period of competition by great companies, from 1848 to 1859.
5. The period of contractor's lines and companies' extensions, from 1859 to 1865.

III.—DISTRIBUTION OF RAILWAYS IN THE UNITED KINGDOM.

The returns of the Board of Trade to the end of 1865 give the following distribution of the 13,289 miles then open :—

	Double Lines.	Single Lines.	Total Miles Open.
England and Wales.....	6,081	3,170	9,251
Scotland.....	946	1,254	2,200
Ireland.....	476	1,362	1,838
	<u>7,503</u>	<u>5,786</u>	<u>13,289</u>

Hence there is a considerable preponderance of double lines over single lines in England, and of single lines over double in Scotland and Ireland.

The following table shows which country has the greatest length of railways in proportion to its area :—

	Area in Square Miles.	Railway Mileage.	Square Miles per Mile of Railway.
England and Wales.....	57,812	9,251	6.25
Scotland.....	30,715	2,200	14.
Ireland.....	32,512	1,838	17.7

So that England and Wales have a mile of railway for every six and a half square miles of country, being the highest proportion in the world, while Scotland has less than half that accommodation, and Ireland little more than one-third.

The following table shows which country has the greatest length of railway in proportion to population :—

	Population in 1860.	Railway Mileage.	Population per Mile of Railway
England and Wales.....	20,228,497	9,251	2,186
Scotland.....	3,096,308	2,200	1,409
Ireland.....	5,850,309	1,838	3,162

So that Scotland, a thinly inhabited country, has the greatest railway mileage in proportion to her population, and we shall afterwards find that she stands at the head of all European countries in this respect.

The manner in which this railway mileage is distributed through England deserves some attention. A railway map will show that the general direction of English lines is towards the metropolis. London is a centre to which nearly all the main lines converge. Every large town is, in its degree, a centre of railway convergence. For example, look at the lines radiating from Leeds, from Hull, from Birmingham, or from Bristol. But all those lesser stars revolve, so to speak, round the metropolis as a central sun.

A great deal may be learned of the character and political state of a country from the convergence of its railway lines. Centralising France concentrates them all on Paris. Spain, another nation of the Latin race, directs her railways on Madrid. Italy shows her past deficiency of unity, and want of a capital, by her straggling and centreless railroads. Belgium is evidently a collection of co-equal cities without any preponderating focus. Germany betrays her territorial divisions by the multitude of her railway centres. Austria, on the contrary, shows her unity by the

convergence of her lines on Vienna. The United States of America prove their federal independence by the number of their centres of radiation.

The national character of the English nation may be traced in the same way. Though our railways point towards London, they have also another point of convergence—towards Manchester and the great port of Liverpool. The London and North Western, the Great Northern (by the Manchester, Sheffield and Lincolnshire line), the Great Western and the Midland run to Manchester and Liverpool from the south. The Manchester, Sheffield and Lincolnshire railway, the London and North Western Yorkshire and Carlisle lines, and the network of the Lancashire and Yorkshire Company converge on them from the east and north. The London and North Western Welsh railways and the Mid Wales and South Wales lines communicate with them from the west. Thus our railway system shows that Manchester and Liverpool are the manufacturing and commercial capitals of the country, as London is its monetary and political metropolis, and that the French centralization into a single great city does not exist in England.

It remains to describe the great systems into which the English railways have been amalgamated. There are in England twelve great companies, with more than £14,000,000 each of capital, which in the aggregate comprises nearly seven-eighths of our total mileage and capital. They divide the country into twelve railway kingdoms, generally well defined, but sometimes intermingled in the most intricate manner. They may be classified into the following seven districts:—

	Miles Open.	Capital Expended.
1. <i>North Western District</i> —London and North Western Railway.....	1,806	£58,210,000
2. <i>Midland District</i> —Midland Railway.....	677	26,108,000
3. <i>North Eastern District</i> —Great Northern Railway... North Eastern Railway	422 1,121	18,200,000 41,158,000
4. <i>Mersey to Humber District</i> —Lancashire and Yorkshire Railway..... Manchester, Sheffield and Lincolnshire Railway...	408 246	21,114,000 14,118,000
5. <i>Eastern District</i> —Great Eastern Railway.....	709	23,574,000
6. <i>South Eastern District</i> —South Eastern Railway... London, Chatham and Dover Railway..... London and Brighton Railway.....	819 175 294	18,628,000 14,768,000 14,561,000
7. <i>South Western District</i> —London and South Western Railway..... Great Western Railway.....	500 1,292	16,864,000 47,680,000
Total.....	7,564	£309,421,000

In Scotland there are three great companies:—

	Miles Open.	Capital Expended.
1. <i>South East Coast</i> —North British Railway.....	782	£17,802,000
2. <i>Central District</i> —Caledonian Railway.....	561	14,797,000
3. <i>South West Coast</i> —Glasgow and South Western....	249	5,608,000
Total.....	1,542	£38,207,000

which include three-fourths of the whole mileage and capital of Scotch railways.

In Ireland there are only two large companies :—

	Miles Open.	Capital Expended.
1. <i>South Western District</i> —Great Southern and Western	420	£5,712,000
2. <i>Midland District</i> —Midland Great Western.....	260	8,625,000
Total.....	680	£9,887,000

which embrace rather more than two-fifths of the capital and mileage.

The above figures are taken from *Herepath's Railway Journal*, made up very nearly to the present time.

The following table shows the average gross receipts and net profits, for three years, for the United Kingdom, and also the dividends paid on ordinary stock in the above great companies, except the London, Chatham and Dover :—

	AVERAGE RECEIPTS AND DIVIDENDS PER CENT.		
	1857.	1861.	1865.
Gross receipts.....	7.87	8.27	8.57
Net profits.....	4.19	4.30	4.46
<i>Dividends of Great Companies :</i>			
12 English.....	4.00	4.45	4.65
8 Scotch.....	4.55	4.90	5.70
2 Irish.....	5.00	5.00	3.56
Average dividends....	4.51	4.78	4.64

IV.—COST OF RAILWAYS IN THE UNITED KINGDOM.

The total capital authorized and expended, up to the end of 1865, is given in the Board of Trade Returns, as follows, including the companies estimated for who have not made a return.

CAPITAL AUTHORIZED.	
Shares.....	£434,467,000
Loans.....	148,968,000
Total.....	£578,425,000

CAPITAL EXPENDED.	
<i>Debenture Capital :</i>	
Stock.....	£18,812,000
Mortgages.....	98,069,000—111,871,000
Preference capital.....	124,517,000
Ordinary capital.....	220,088,000
	£456,421,000

Hence the following conclusions :—

1. The capital expended is more than half as large as the national debt.

2. The debenture and preference capital, which are practically first and second mortgages of railway property, amounted in 1865 to more than half the whole capital expended.

So that railway property is virtually mortgaged to the debenture and preference capitalist for about half its value.

The preference capital has for some years been steadily increasing, while the ordinary capital has remained almost stationary. During 1865 the preference capital increased by £19,615,000, while the ordinary capital only increased by £4,650,000. As the old companies almost always increase their capital by preference stock, I anticipate that in seven or eight years the debenture and preference capital will have risen to two-thirds of the capital expended.

3. The unissued or unpaid capital was, in 1864, £95,000,000. This increased largely in 1865, by the great number of miles authorized in that year, and in the return for that year is £122,000,000.

The expenditure was, in 1864, divided between the three kingdoms in the following proportions, including non-returning companies :—

	Capital Expended.	Cost per Mile of Railway.
England and Wales.....	£279,000,000	£41,033
Scotland.....	50,206,000	22,820
Ireland.....	26,394,000	14,860

Thus Ireland has made her railways for one-third the cost, and Scotland for little more than half the cost of the English railways—a result which might be partly expected from their larger proportions of single lines, the greater cheapness of land, and in Ireland the lower wages of labor.

But the English expenditure is the highest in the world, and has given rise to severe remarks on the wastefulness of the English system. Let us examine the causes of expense.

1. The English expenditure includes, on a probable estimate, no less than £40,000,000 sterling absorbed by metropolitan railways and termini. This of itself is £4,500 per mile on the 8,890 miles constructed.

It also includes very large sums for termini in Manchester, Liverpool, Leeds, Sheffield, Birmingham and other great towns, far beyond what is paid in continental cities.

2. The English expenditure also includes considerable capital for docks, as at Grimsby, where £1,000,000, was laid out by the Manchester, Sheffield and Lincolnshire Company; and at Hartlepool, where £1,250,000 was spent by a company now merged in the North Eastern.

It also includes in many instances capital expended on steamers and capital for the purchase of canals.

3. The counties whose trade and population is greatest, and which are most thickly studded with railways, as Lancashire, Yorkshire and Glamorgan, are exceedingly hilly, and necessitate heavy embankments, cuttings and tunnels, which enormously increase the cost of construction. The Lancashire and Yorkshire Railway has cost £52,400 per mile for the whole of its 403 miles. Had those counties been as flat as Belgium the company might probably have saved something like £20,000 per mile, or £8,000,000 sterling. The Manchester, Sheffield and Lincolnshire Company, even after deducting £1,000,000 for the docks of Grimsby, have spent £53,000 per mile. A flat country might have saved them a similar sum per mile, or £5,000,000 sterling.

4. England, as the inventor of railways, had to buy experience in their construction. Other nations have profited by it. There is no doubt

that our present system of lines could now be made at very much less than their original cost. In addition we have paid for experiments, such as the broad gauge and atmospheric railway.

5. The great preponderance of double lines over single (6,081 miles against 3,170), has largely increased the expense as compared with the single lines which predominate in other countries.

6. The price of land in a thickly populated country like England must necessarily be higher than in the more thinly inhabited continental countries. But beyond this, English landowners, in the first vehement opposition to railways, acquired the habit of being bought off at high prices and of exacting immense sums for imaginary damages. The first Eastern Counties line was said to have paid £12,000 per mile for land through an agricultural country, being about ten times its real value. This habit of exaction has been perpetuated to our own day. As an every day instance, I may mention that, only a few months ago, a gentleman of great wealth was selling to a railway company which he had supported in Parliament thirty acres of grass land, of which the admitted agricultural value was £100 an acre, and three acres of limestone, of which the proved value to a quarryman was £300 an acre. There was no residential damage, and the railway skirted the outside of the estate. The price of the whole in an auction room would have been about £4,000. The proprietor's agents, supported by a troop of eminent valuers, demanded £25,000!

7. Parliamentary expenses are an item of English expenditure not occurring in countries where the concession of railways is the province of a department of the government. But in those countries there is almost always a "promoter's fund" and secret service fund, which often attain very large dimensions. Which is the preferable alternative? Besides, those who object to parliamentary committees must be prepared to give us a practicable substitute, which will suit the habits and feelings of the British nation. Now, a free nation must have liberty to bring forward schemes for the public accommodation, and to have them decided by some public tribunal after full investigation and hearing all parties. There must be witnesses, and, where millions of money are at stake, there must be the power of being represented by the ablest advocates. Commissions appointed by the Board of Trade, or any other department, would be just as expensive. The expense of parliamentary committees is the price we pay for free trade in railways, and for our present amount of railway development.

I believe that these causes will fully account for the higher cost of English railways, and, except as regards the cost of land, I think that no valid or practical objection can be taken to them. There is certainly the consolation of knowing that in return for our money we have a more efficient system of railways than any other country.

V.—TRAFFIC AND BENEFIT OF RAILWAYS IN THE UNITED KINGDOM.

In order to appreciate the wonderful increase of traffic which has resulted from railways, it is necessary to know the traffic of the kingdom before their introduction.

Previous to the opening of the great trunk lines in 1835, passengers were conveyed by mail and stage coaches, a system which had reached a high degree of perfection. Mr. Porter, in his "Progress of the Nation," has calculated, from the stage coach license returns, the total number of miles travelled by passengers during 1834 as 358,290,000, which represented 30,000,000 persons travelling 12 miles each. The fares were very high, being by the mails 6d. a mile inside and 4d. outside, exclusive of coachmen and guards, and rather less on the stage coaches. Including coachmen and guards, the average fares paid may be taken at 5d. per mile. Hence the 30,000,000 passengers paid a total of £8,250,000.

Goods were conveyed by water or by road.

Water communication had been developed with great perseverance, and was nearly as follows:—

	Miles.
Canals—England.....	2,600
Scotland.....	225
Ireland.....	275—3,100
Navigations.....	900
Total.....	4,000

Being one mile to every thirty square miles of country.

Canal companies always regarded with great jealousy any attempt to ascertain the amount of their traffic, and the only calculation I can find is in Smiles' "Life of Brindley" (p. 464), where it is estimated at 20,000,000 tons annually. The rates charged by canal carriers were, for the great bulk of general goods, about 4d. per ton per mile. Thus, London to Birmingham was 40s. per ton, and London to Manchester 70s. to 80s., the direct distances being 113 and 200 miles. The rates for coal were considerably less, but so high as to restrict its carriage to short distances, and to render its amount inconsiderable.

The tonnage carried by road appears to have been about one-sixth of that conveyed by canal, and may be taken at 3,000,000 tons. The rates by road were about 13d. per ton per mile, the stage wagons from London to Birmingham charging no less than £6 per ton for the 113 miles, and those from London to Leeds the enormous amount of £13 per ton for 190 miles. Assuming that each ton by road or water was carried 20 miles—a less average than at present—the total rates paid would have been nearly £8,000,000. Hence the total traffic receipts about the year 1834 may be calculated as follows:—

Passengers.....	30,000,000	=	£8,250,000
Goods.....	tons 3,000,000	=	8,000,000
			£14,250,000

The effect of railways was very remarkable. It might reasonably be supposed that the new means of communication would have supplanted and destroyed the old. Singular to relate, no diminution has taken place either in the road or canal traffic. As fast as coaches were run off the main roads they were put on the side roads, or reappeared in the shape of omnibuses. At the present moment there is probably a larger mileage of road passenger traffic than in 1834. The railway traffic is new and

additional traffic. But railways reduced the fares very materially. For instance, the journey from Doncaster to London by mail used to cost £5 inside and £8 outside (exclusive of food), for 156 miles, performed in ten twenty hours. The railway fares are now 27s. 6d. first class, and 21s. second class for the same distance, performed in four hours. The average fares now paid by first, second and third class passengers are 1½d. per mile, against an average of 5d. in the coaching days, being little more than one-fourth of the former amounts.

On canals the effect of railway competition was also to lower the rates to one-fourth of the former charges. In consequence the canal tonnage actually increased, and is now considerably larger than it was before the competition of railways. Hence the railway goods traffic, like its passenger traffic, is entirely a new traffic. The saving in cost is also very great; goods are carried by rail at an average of 1½d. per ton, or 40 per cent of the old canal rates.

Now observe the growth of this new railway traffic. The following table from the Parliamentary returns (except for 1865), shows the receipts from passenger and goods traffic on railways in the following years:—

INCREASE OF TRAFFIC.

	Total Receipts.	Average Annual Increase.	Av. of whole 22 years.
1848.....	£4,585,000	£1,079,000 } 1,653,000 } 1,352,000 } 1,619,000 }	£1,423,000
1848... ..	9,983,000		
1855.....	21,507,000		
1860.....	27,766,000		
1865.....	35,890,000		

Thus the average annual increase for the whole twenty-two years was £1,423,000 per annum; and the increase was largest in the latest years. The traffic in 1864 and 1865, was thus made up:—

	1864.	1865.
Passengers.....	£15,684,000	£16,572,000
Goods.....	16,331,000	19,818,000
Total receipts.....	£32,015,000	£36,390,000

And the things carried were, exclusive of carriages and animals:—

	1864.	1865.
Passengers.....	229,272,000	251,868,000
Goods, tons.....	110,400,000	114,598,000

Being six times as many as before the introduction of railways.

The increase was extraordinary:—

	1864 over 1863.	1865 over 1864.
Increase in passenger receipts....	£1,168,000	£888,000
“ goods “	1,696,000	988,000
	£2,864,000	£1,876,000

So that the increase in 1864 was just double the average annual increase. The increase in things carried was:—

	1864 over 1863.	1865 over 1864.
Increase in number of passengers	24,637,000	22,590,000
“ tons of good.....	9,800,000	4,228,000

An increase in 1864 equal to five-sixths of the whole number of passengers in 1834, and to five-twelfths of the total goods tonnage in 1834; a wonderful proof of the capabilities and benefits of the railway system.

Now let us examine the saving to the country. Had the railway traffic of 1865 been conveyed by canal and road at the pre-railway rates, it would have cost three times as much. Instead of £36,000,000 it would have cost £108,900,000. Hence there is a saving of £72,000,000 a year, or more than the whole taxation of the United Kingdom.

But the real benefit is far beyond even this vast saving. If the traffic had been already in existence, it would have been cheapened to this extent. But it was not previously in existence; it was a new traffic, created by railways, and impossible without railways. To create such a traffic, or to furnish the machinery by which alone it could exist, is a far higher merit than to cheapen an existing traffic, and has had far greater influence on the prosperity of the nation.

Look at the effects on commerce. Before 1833, the exports and imports were almost stationary. Since that time they have increased as follows:—

INCREASE OF EXPORTS AND IMPORTS.

One Year.	Total Exports and Imports.	Per cent. Increase.	Per cent. per annum Increase.
1833.....	£85,500,000	36	4.
1842.....	116,000,000	47	6.
1850.....	171,000,000	52	10.4
1855.....	260,000,000	44	~
1860.....	375,000,000	20	
1865.....	490,000,000		

I am far from attributing the whole of this increase to railways. Free trade, steamboats, the improvements in machinery, and other causes contributed powerfully to accelerate its progress. But I wish to call attention to two facts.

1. This increase could not have taken place without railways. It would have been physically impossible to convey the quantity of goods, still less to do so with the necessary rapidity.

Mr. Francis, in his “History of Railways,” draws a striking picture of the obstacles to commerce in 1824, from the want of means of conveyance:

“Although the wealth and importance of Manchester and Liverpool had immensely increased, there was no increase in the carriage power between the two places. The canal companies enjoyed a virtual monopoly. Their agents were despotic in their

treatment of the great houses which supported them. The charges, though high, were submitted to, but the time lost was unbearable. Although the facilities of transit were manifestly deficient, although the barges got aground, although for ten days during summer the canals were stopped by draught, and in severe winters frozen up for weeks, yet the agents established a rotation by which they sent as much or as little as suited them, and shipped it how or when they pleased. They had levees attended by crowds, who almost implored them to forward their goods. The effects were disastrous; mills stood still for want of material; machines were stopped for lack of food. Another feature was the extreme slowness of communication. The average time of one company between Liverpool and Manchester was four days, and of another thirty six hours; and the goods, although conveyed across the Atlantic in twenty-one days, were often kept six weeks in the docks and warehouses of Liverpool before they could be conveyed to Manchester. 'I took so much for you yesterday, and I can only take so much to-day,' was the reply when an urgent demand was made. The exchange of Liverpool resounded with merchants' complaints, the counting-houses of Manchester re-echoed the murmurs of manufacturers."—Vol. i, pp. 77 and 78.

This intolerable tyranny produced the Manchester and Liverpool Railway, and gave the greatest impetus to railway development.

2. The increase of imports and exports was in strict proportion to the development of railways. The following table shows the miles of railway and navigation opened, and the total exports and imports. It must be remembered that there are about 4,000 miles of navigation, and that the exports and imports had been for some time stationary before 1833:

PROPORTION OF EXPORTS AND IMPORTS TO RAILWAYS AND NAVIGATION.

Year.	Miles of railway and navigation.	Total exports and imports.	Exports and imp'ts per mile.
1833.....	4,000	£85,500,000	£21,375
1840.....	5,200	119,000,000	22,884
1845.....	6,441	135,000,000	20,959
1850.....	10,733	171,800,000	16,006
1855.....	12,334	260,284,000	21,098
1860.....	14,438	375,052,000	25,985
1865.....	17,289	490,000,000	28,341

Here the increase in exports and imports keeps pace with railway development from 1833 to 1845, falls below it during the enormous multiplication of railways and the railway distress from 1845 to 1850, rises again to the former level in 1855, and outstrips it after that year, aided by the lowering of fares and the greater facilities for through booking and interchange of traffic. I cannot think that this correspondence within the two increases is accidental, especially as I shall show that it exists also in France.

But, it may be said, how do exports and imports depend on the development of the railway system? I answer, because they depend on the goods traffic; and the goods traffic increases visibly with the increase of railway mileage and the perfecting of railway facilities. Goods traffic means raw material and food brought from ports, or mines, or farms, to the producing population, and manufactured articles carried back from the producers to the inland or foreign consumers. The exports and imports bear a variable but appreciable proportion to the inland traffic. Every mineral railway clearly increases them; every agricultural railway

increases them less clearly but not less certainly. Hence I claim it as an axiom, that the commerce of a country increases in distinct proportion to the improvement of its railway system, and that railway development is one of the most powerful and evident causes of the increase of commerce.

Now, let us turn to the benefits which railways have conferred on the working classes. For many years before 1830 great distress had prevailed through the country. Mr. Molesworth, in his "History of the Reform Bill," says that it existed in every class of the community. "Agricultural laborers were found starved to death. In vain did landlords abate their rents and clergymen their tithes; wages continued to fall, till they did not suffice to support existence." Innumerable petitions were presented from every county in England, stating that the distress "was weighing down the landholder and the manufacturer, the shipowner and the miner, the employer and the laborer." Trade and commerce were standing still, while population was rapidly increasing, at nearly the same rate as during the most busy and prosperous period of the French war. The increase from 1801 to 1861 is given in the census:—

ENGLAND AND WALES.

Year.	Population.	Inc. per ct. for 10 years.	Year.	Population.	Inc. per c. for 10 years.
1801.....	8,892,536	11	1841.....	15,914,148	14
1811.....	10,164,256	14	1851.....	17,927,609	13
1821.....	12,000,236	18	1861.....	20,066,224	12
1831.....	13,896,797	16			

The increase during the ten years from 1821 to 1831, which included so much distress, was no less than 16 per cent, distributed pretty uniformly between the agricultural and manufacturing counties, and in itself almost a sufficient cause for the distress. But what has happened since? Increased facilities of transit led to increased trade; increased trade gave greater employment and improved wages; the diminution in the cost of transit and the repeal of fiscal duties cheapened provisions; and the immense flood of commerce which set in since 1850 has raised the incomes and the prosperity of the working classes to an unprecedented height. Railways were the first cause of this great change, and are entitled to share largely with free trade the glory of its subsequent increase and of the national benefit. But one portion of the result is entirely their own. Free trade benefited the manufacturing populations, but had little to do with the agriculturists. Yet the distress in the rural districts was as great or greater than in the towns, and this under a system of the most rigid protection. How did the country population attain their present prosperity? Simply by the emigration to the towns or colonies of the redundant laborers. This emigration was scarcely possible till the construction of railways. Up to that time the farm laborer was unable to migrate; from that time he became a migratory animal. The increase of population in agricultural counties stopped, or was changed into a decrease, and the laborers ceased to be too numerous for the work. To this cause is principally owing the sufficiency of employment and wages throughout the agricultural portion of the kingdom. If I may venture on a comparison, England was, in 1830, like a wide-spreading plain flooded with stagnant waters, which were the cause of malaria and distress. Railways were

a grand system of drainage, carrying away to the running streams, or to the ocean, the redundant moisture, and restoring the country to fertility and prosperity.

VI.—RAILWAYS IN FRANCE.

In turning from England to France, we enter a country completely different in its railway organisation. In England everything is left to individual enterprise and independent companies. In France nothing can be done without the aid of the Government. They tried the English system, and failed, just as they tried parliamentary government and failed. The independent railway companies broke down, and it was found absolutely necessary to change to a *regime* of government guarantees and government surveillance, suited to the genius of the French people, and under which they regained confidence and prosperity.

Before the introduction of railways, France possessed an extensive system of water communication, which is now of the following extent :

Navigable rivers.....	Miles. 4,820
Canals.....	2,880
Total.....	7,700

by which goods were conveyed at very reasonable rates, varying from 1d. to 2d. per ton per mile, or about half the English charges. But the delays were very great; three or four months for a transit of 150 miles was quite usual. And the canals paid scarcely 1 per cent. dividend, while their English cotemporaries were paying 5 to 20 per cent.

Communication by road was also cheaper but slower than in England. The passengers paid from 1½d. to 3d. per mile, instead of the 3d. to 6d. paid in England. But they only travelled five to six miles an hour, instead of the English eight to ten. Goods paid by road about 3d. per ton per mile for ordinary conveyance, and 6d. for quick despatch, being less than half the English charges. The distance in France were greater than in England, the commerce was less, and labor and food were cheaper; thus fully accounting for the difference.

Tramways were introduced into France in 1823, by the construction of a line of eleven miles from the coal mines of St. Etienne, and this was followed by two much longer lines of a similar character, which was opened by sections between 1830 and 1834. They are dignified in French books with the title of railways, but they were really nothing but horse tramways, and were sometimes even worked by oxen.

The success of the Manchester and Liverpool Railway provoked some real though abort railways in France, especially those from Paris to St. Germain and to Versailles. But in 1837 only 85 miles had been opened, against nearly 500 in England. In 1837 and 1838 the French Chambers threw out a scheme of their Government for the construction by the State of an extensive system of railways, but granted concessions to private companies for lines to Rouen, Havre, Dieppe, Orleans, and Dunkerque. These lines were abandoned for a time, in 1839, from want of funds.

In this emergency, Mr. Locke, the great English engineer, restored the fortunes of French railways. Assisted by the London and South Western Company and Mr. Brassey, and with subventions from the French Gov-

ernment, and subscriptions from English shareholders, and a powerful corps of English navvies, he recommenced, carried through the line from Paris to Rouen and from Rouen to Havre, and fairly gave the start to railway enterprise in France.

In 1842 a new law was passed, by which the State undertook the earth-works, masonry, and stations, and one-third of the price of land; the departments were bound to pay by instalments the remaining two-thirds of the land; and the companies had only to lay down rails, maintain the permanent way, and find and work the rolling stock. It was intended that three-fifths of the total cost should be borne by the state and departments and two-fifths by the companies. Under this system of subventions a number of concessions were made, the shares rose to 50 per cent. premium, and in 1848 a total of 1,092 miles had been opened. The revolution of 1848 was a terrible shock to their credit, and shares went down to half their value. Many lines became bankrupt and were sequestered, and for three years fresh concessions were entirely stopped. But the concessions already made were slowly completed, and by the end of 1851, France had opened 2,124 miles, against 6,889 opened in the United Kingdom.

In 1852 the Emperor took French railways in hand, and by a system of great wisdom, singularly adapted to the French people, he put an end to the previously feeble management, and launched into a bold course of railway development. The French public shrank from shares without a guarantee; he gave a state guarantee of 4 or 5 per cent. interest. The French public preferred debentures to shares; he authorised an enormous issue of debentures. The companies complained of the shortness of their concessions; he prolonged them to a uniform period of ninety-nine years. At the same time he provided for the interest of the state by a rigid system of government regulation and audit. And, lastly, coming to the conclusion that small companies were weak and useless, he amalgamated them into six great companies, each with a large and distinct territory; and able, by their magnitude, to inspire confidence in the public, and aid the government in the construction of fresh railways. This vigorous policy was very soon successful. Capital flowed in rapidly, construction proceeded with rapidity, and between the end of 1851 and 1857 the length of the railways opened was increased from 2,124 miles to 4,475, or more than doubled. England at that time had opened 9,037 miles.

France was now exceedingly prosperous. Her exports and imports had increased from £102,000,000 in 1850, to £213,000,000 in 1857, or more than 100 per cent in seven years. The six great companies were paying dividends which averaged 10 per cent.; and the government guarantees had never been needed. Railways united all the great towns and ports, and met the most pressing commercial wants. But the Emperor was not satisfied. France, with double the territory of England, had only half the railway accommodation, and wide districts between all the trunk lines were totally unprovided with railways. The government engineers of the *ponts et chaussées* were prepared with plans and estimates for 5,000 miles of lines, which had been inquired into, and officially declared to be *d'utilité publique*, i. e., a public necessity. The country districts clamoured for these lines. But how were they to be made? The public were not prepared to subscribe for them, the Government could not undertake them, and the great companies were too well satisfied with their 10 per cent. dividend to wish to endanger it by unremunerative branches.

The plan of the Emperor was intricate but masterly. He said to the companies: "You must make these lines. The 4,525 miles of railway already made shall be a separate system for the present, under the name of *Ancien Réseau*, the old lines. You no longer require the guarantee of the State for these lines. But I will give you an extension of the ninety-nine years of your concessions, by allowing them to commence at later dates; beginning with 1852 for the Northern Company, and at various dates for the rest, up to 1862, for the Southern Company. I also engage that £9,000,000 sterling of the net revenue of these old lines shall for ever be divisible among the shareholders, without being liable for any deficit of the extension lines, an amount which will give you a clear and unfeasible dividend of 6 to 8 per cent.; with a strong probability—almost a certainty—of getting much more from surplus traffic."

"Next the new lines, 5,128 miles in length, shall be a separate system, under the name of *Nouveau Réseau*, or extension lines. Their estimated cost is £124,000,000, and you, the companies, may raise this sum by debentures, on which the Government will guarantee 4 per cent. interest, and .65 sinking fund for paying them off in fifty years. Any extra cost you must pay yourselves."

These, in their briefest possible form, are the terms on which the Emperor imposed an average of nearly 1,000 miles per company on the six great companies of France. They were accepted with considerable reluctance. Their effect has been to lower the value of the shares of the great companies, for the bargain is considered disadvantageous. The companies cannot borrow at less than 5.75, so losing 1.10 per cent. per annum on every debenture; and as the lines cost more than the £124,000,000., the overplus has been raised by the companies by debentures, for which they alone are responsible. But on the other hand, they get an immense amount of fresh traffic over their old lines, which must ultimately more than repay this loss. English Railways would be thankful if their extensions cost them so little.

In the following years other lines were added, with similar guarantees and with considerable subventions from the State, and in 1863 an additional series of lines, 1,974 miles in length, were imposed on similar terms, but with some modifications of the conventions with two of the weakest companies.

Besides the Government lines, the Emperor encouraged to the utmost the efforts of the departments, and in July, 1865, a law was passed respecting *chemins de fer d'intérêt local*, which authorised departments and communes to undertake the construction of local railways at their own expense, or to aid concessionaires with subventions to the extent of one-fourth, one-third, or in some cases one-half the expense, not exceeding £240,000.

Not content with passing this law, the minister of public works, in the very next month wrote to the *prefets* of the 88 departments of France, to acquaint them fully with its provisions, and to invite them to communicate with their councils general, and deliberate upon the subject. The result was that sixteen councils requested their *prefets* to make surveys and inquiries to ascertain what lines would be advisable. 32 departments authorized their *prefets* to prepare special plans, and even to make provisional agreements with the companies to carry out lines, subject to confir-

mation by the councils. Two of these made immediate votes, viz., the department of Ain, £56,000, and Herault, £260,000 for lines which they approved. A third, the department of Calvados, voted subventions amounting to £1,000 per mile for one line, and £2,000 per mile for another line. Besides, these five departments put railroads into immediate execution by contracts with independent companies. Among these were :

	Subvention.
Saone et Loire.....	£14,000
" (besides the land).....	40,000
Manche (with an English company, and including land).....	40,000
Rhone.....	240,000
Tarn.....	171,000

By these measures the Emperor has brought up the concessions to the following total :

	Miles.
<i>Ancien Réseau</i> , or old lines.....	8,927
<i>Nouveaux</i> " or extension lines.....	7,565
	<hr/> 12,592

Being very nearly the length of our constructed lines in 1864.

But of this mileage there has been constructed up to the present time only... 8,134

Leaving still unconstructed..... 4,458

being one-third of the whole concessions. Of this, 1,800 miles are now being constructed, and 1,600 miles are expected to be opened by the end of 1867.

Hence the lines constructed in France up to and including 1865, are 8,134 miles, or about the same length as the lines constructed in the United Kingdom to the end of 1855; so that France is ten years behind England in actual length of railways constructed, and at least fifteen years behind England if her larger territory and population are taken into account; and I must add that France would have been very much farther behind had it not been for the vigorous impulse and the wise measures of the Emperor Napoleon.

The progress of completion from 1837 to the present time is shown in the following table :

MILES CONSTRUCTED.

Year.	Average annual	
	Miles open.	Increase.
1837.....	86	84
1840.....	338	34
1845.....	508	259
1850.....	1,807	301
1855.....	3,315	454
1860.....	5,586	509
1865.....	8,134	

This table shows the insignificant rate of progress up to 1845, and the

larger but still slow progress up to 1855. From that time the effect of the Emperor's policy becomes visible in the increased rate of progression. It is expected that between 1852 and 1872 more than 9,500 miles will have been opened, quadrupling the number constructed in the previous twenty years, and contributing in the highest degree to the prosperity and wealth of the French nation.

Railway history in France may be briefly summed up in four periods:

1. The period of independent companies from 1831 to 1841.
2. The period of joint partnership of the State and the companies from 1842 to 1851.
3. The period of Imperial amalgamations and guarantees from 1852 to 1857.
4. The period of guaranteed extension lines from 1858 to the present time.

[To be Continued.]

CENTRAL RAILROAD OF NEW JERSEY.

This road extends from Phillipsburg, on the Delaware, to Elizabethport on the waters of the harbor of New York, a distance of 64 miles, with an extension to Jersey City, opposite New York (opened in 1864), a further distance of 10 miles. It is, throughout, a double track road, and a third rail is laid between the junction of the Delaware, Lackawanna and Western Railroad, at Hampton, to Elizabethport, for the accommodation of the wide cars of that line. A third track is about to be laid between Elizabeth City and Jersey City, the traffic on this portion of the line having increased beyond the capacity of the two existing tracks. During the past year a stock yard and market, covering 40 acres, has been opened at Communipaw, and the new coal depot at Port Johnston has been brought into use. The works of the American Dock and Improvement Company are also being carried on with energy and success. Though the stock yard and dock properties belong to separate organizations, the Central company own the largest interest therein, and exercise full control over both. The improvements made by the company during the past three years have more than doubled its capital account: but the increase of business in consequence of their completion has been sufficient to ensure the continuance of the usual 10 per cent. dividend. It is not intended to make further new expenses on account of construction, but simply to finish up the work on hand.

The amount of rolling stock owned by the company at the close of each of the last five fiscal years is shown in the following statement:

	'62.	'63.	'64.	'65.	'66.		'62.	'63.	'64.	'65.	'66.
Engines.....	38	51	59	65	83	Freight cars.....	946	807	813	863	434
Passenger cars.....	20	22	34	52	58	Coal ".....	200	200	380	461	896
Mail, express, &c., cars....	7	7	11	17	20	Working ".....	29	30	71	71	71

—the four and six wheel cars being reduced to their equivalent in eight wheel cars.

The receipts and expenses on account of operating the road and ferries of the company for the same years were as follows:

	1863.	1863.	1864.	1865.	1866.
Passenger earnings.....	\$280,305	\$387,969	\$489,334	\$688,774	\$763,471
Merchandise ".....	481,977	608,325	781,733	898,327	1,099,239
Coal.....	661,231	1,081,153	1,617,954	1,888,498	1,619,744
Mails, express, rents, &c.....	34,024	37,530	39,234	60,530	99,790
Total earnings.....	\$1,397,537	\$1,941,976	\$2,537,184	\$3,036,890	\$3,561,344
Operating expenses.....	622,945	814,733	1,231,554	1,748,498	1,965,976
Nett earnings.....	\$774,592	\$1,127,243	\$1,305,630	\$1,287,653	\$1,617,268

From which were disbursed the following:

	1863.	1863.	1864.	1865.	1866.
Taxes—United States.....	\$3,363	\$31,731	\$49,602	\$90,043	\$111,143
" State.....	34,523	34,576	25,417	81,319	35,998
" Interest.....	143,513	147,713	155,134	170,369	215,754
Renewals, &c.....	173,733	185,668	.....	184,158	108,854
Dividends, 10 per cent.....	888,000	401,578	558,373	561,676	1,145,484
Surplus.....	60,521	365,029	504,904	.....	.....

An extra dividend of 10 per cent was paid from the renewal fund or surplus earnings as found at the end of 1863. This amounted to \$515,000, leaving in the fund named \$63,255, to which was added \$60,000 premium on new stock issued—making the true balance at the end of 1863 \$123,255, and with the surplus of 1864 a total of \$628,159, at which amount the renewal fund still remains.

The following statements exhibit the operations on the road and ferries for the same five years:—

	1863.	1863.	1864.	1865.	1866.
Miles run by engines hauling trains—					
Passenger.....	301,333	314,483	390,641	421,334	443,547
Merchandise.....	146,186	187,159	177,638	230,361	293,110
Coal.....	309,568	393,451	415,743	393,663	496,180
Wood and Gravel.....	29,873	26,947	63,949	133,590	140,310
Total on Central Railroad.....	687,304	812,041	948,213	1,187,978	1,373,086
Total on New Jersey Railroad.....	53,584	59,164	(abandoned).		
Aggregate miles run by trains.....	740,788	871,205	948,213	1,187,978	1,373,086
Miles run by ferry boats.....	47,656	33,598	39,047	47,073	40,461
Passengers and tonnage carried—					
Passengers.....	419,808	529,017	698,806	923,806	1,083,592
Merchandise (3,000 lbs.).....	193,985	263,695	273,366	317,181	424,003
Iron (3,240 lbs.).....	70,303	80,853	69,235	75,469	103,009
Coal (3,240 lbs.).....	503,875	613,954	675,743	494,697	773,173
{ Lackawanna.....					
{ Lehigh.....	314,195	483,927	474,231	509,819	511,076
Mileage of passengers and tonnage—					
Passengers.....	11,759,879	13,181,971	19,297,515	23,831,715	25,966,373
Merchandise.....	11,168,060	13,540,017	14,610,905	17,833,856	24,045,007
Iron.....	4,437,108	5,173,455	4,450,400	4,850,016	6,592,612
Coal.....	43,447,733	56,795,557	63,873,309	55,633,694	69,431,516

The gross receipts per mile run by trains and the cost of operating are shown in the following table:—

	1863.	1863.	1864.	1865.	1866.
Passenger trains.....	\$1 36	\$1 47	\$1 54	\$1 73	\$1 70
Merchandise trains.....	3 29	3 23	4 12	3 89	3 76
Coal trains.....	3 14	2 66	2 16	3 53	3 23
Average of all trains.....	\$3 19	\$3 47	\$3 88	\$3 87	\$3 90
Expenses per mile run.....	0 63	1 11	1 39	1 66	1 59
Profits per mile run.....	\$1 80	\$1 36	\$1 44	\$1 21	\$1 31

The financial condition of the company as shown on the general balance sheet at the close of each fiscal year reads as follows:—

	1862.	1863.	1864.	1865.	1866.
Capital stock.....	\$3,500,000	\$4,830,000	\$4,500,000	\$10,565,940	\$13,000,000
Funded debt.....	2,000,000	2,000,000	2,000,000	1,509,000	1,500,000
Dividend payable January 1 proximo.,	99,750	110,865	159,118	261,711	299,323
Interest accrued.....	47,833	47,833	47,833	83,350	83,350
Accounts payable.....	390,484	392,377	439,369	543,665	260,400
Renewal fund (balance).....	233,176	633,355	633,159	633,159	633,159
Total.....	\$6,332,198	\$7,708,890	\$9,764,559	\$13,661,735	\$15,111,192

—accounted for, as shown in the following exhibit:

Railroad	\$4,430,897	\$4,592,747	\$4,823,675	\$6,106,957	\$6,794,306
Extension to Jersey City.....	.. ..	253,136	656,336	187,011	31 877
Port Johnston coal wharves.....	.....	122,000	122,000	187,166	213,736
Stations, shops, &c.....	122,000	122,000	122,000	187,166	213,736
Land and works at Elizabethport.....	302,356	302,478	302,478	301,955	301,955
Ferry interest and boats.....	\$17,050	\$07,150	\$54,000	\$04,587	\$04,587
Engines.....	330,000	407,500	585,000	695,000	931,000
Passenger cars.....	49,000	53,500	84,000	178,000	199,000
Freight cars.....	137,673	153,000	194,476	211,260	230,000
Coal cars.....	99,364	100,000	211,000	211,523	553,800
Communipaw filling and bulkheads.....	.....	.....	255,373	366,119	4,417,979
Land, docks, mach'y, &c.....	375,511	330,967	1,405,653	2,845,535	.....
Iron and ties on hand.....	32,900	64,233	51,135	59,177	86,411
Materials & fuel on hand.....	46,653	35,607	41,535	63,197	189,787
Cash & acc'ts receivable.....	123,336	494,579	359,497	405,497	737,594
Total	\$6,332,198	\$7,708,890	\$9,764,559	\$13,661,735	\$15,111,192

The following table shows the relation of capital, earnings, &c.:

	1862.	1863.	1864.	1865.	1866.
Capital per mile of road.....	\$87,970	\$103,437	\$114,365	\$164,796	\$190,246
Earnings " ".....	21,537	20,345	24,336	41,033	48,395
Expenses " ".....	9,738	13,790	16,643	23,637	26,540
Profits " ".....	12,099	17,613	17,644	17,405	21,855
Expenses to earnings, per cent.	44.97	41.56	48.51	57.63	54.94
Profits " ".....	55.23	58.05	51.49	49.38	45.16
Profits to capital and debt, p. c.....	13.75	17.03	15.33	10.56	11.15

The market value of the company's stock, based on the monthly range of selling prices at New York, is shown in the following statement:

	1863.	1863.	1864.	1865.	1866.
January.....	114@119	.. ..	.. ..	.. ..	114 @119
February.....	120@123	170@170	175@175	.. ..	113 @114
March.....	.. ..	175@175	.. ..	.. ..	104 @107½
April.....	.. ..	.. ..	.. ..	.. ..	106½ @110
May.....	.. ..	.. ..	.. ..	.. ..	110 @117
June.....	.. ..	.. ..	.. ..	.. ..	115½ @117
July.....	120@120	.. ..	.. ..	.. ..	116 @120
August.....	.. ..	165@165	.. ..	120@124	120 @123½
September.....	.. ..	.. ..	.. ..	122@125	127 @130
October.....	150@150	.. ..	.. ..	123@123½	127½ @130
November.....	150@150½	.. ..	.. ..	120@122½	128 @128½
December.....	154@155	.. ..	.. ..	118@123	124 @127
Year.....	114@155	165@175	175@175	118@125	104 @123½

The sale-prices for the first six months of 1867 have been as follows: January, 124@125; February, 120@123; March, 116@118; April, 113½@115½; May, 115@118½; June, 117½@120. Half year, 113½@125.

The last notice of this railroad will be found in Vol. LIV. page 450.

THE PREVENTION OF RAILROAD ACCIDENTS.

Although we now travel by rail in this country more securely and more swiftly than ever before, it is generally admitted, we believe, by our most experienced railroad men that more than half of the mortality and injury to passengers arising from railroad accidents might be prevented if due precautions were used by the companies in the construction of their cars, in the repairs of their roads, and in the running of their trains. How far this conviction is shared by the public is evident from the ample damages often awarded when any company is sued in the courts by passengers who have sustained injuries.

An examination of the details of railroad accidents shows that among the most important guarantees of safety, there are two or three which may very properly be made the subject of legislation. The first is the prevention of collision. By the free use of the telegraph it seems to us possible that no train should ever, by night or day approach within a certain distance of another train on the same line of rails. With suitable bye-laws carried out and enforced by a sufficient body of watchmen stationed at suitable intervals along the line of road, the collision of trains might probably be rendered almost impossible, and one of the most frequent dangers of the sacrifice of life would thus be averted from railroad travellers. We are aware that some of our great railroad companies are making great efforts in the direction indicated, but economy induces others to be more remiss, and some uniformity of precautionary provisions might be secured by a wisely framed statute applying to all the roads. In the Convention at Albany, ten days ago, some such measure, we believe, was brought up in the Convention. But this matter is clearly one to be acted on by the Legislature, and not by a Convention assembled to revise the organic law of the State Government. We understand, however that the project finds favor in some influential quarters to appoint a Railroad Board, armed with authority, and held under obligations to take the supervision of these and other matters affecting the relations of the railroads to the public. By whatever means it be effected, however, the frequency of collisions ought to be and may be greatly diminished.

A second cause of railroad accidents arises from the condition of the road. The demand for rapid travelling has on the European railways made it obligatory on the various companies to keep the rails, ties and sleepers in perfect order, and to subject them to frequent inspection. In the leading roads of England we believe every mile of the rails from one end of the track to the other is examined at least once a day by mechanics whose sole business it is to walk along the road for this purpose, each man having a certain length of track allotted him, for the safety of which he is responsible and the condition of which he has to report from actual examination at certain intervals. Were some such arrangement perfected here, rare would be the accidents from rotten ties or broken rails, and the economy of the plan would be promoted if steel rails were generally adopted as is being done we believe to a limited extent on the Erie, Hudson, Harlem roads, and by some of the more enterprising companies in the Western States. The accident a week

ago on the first mentioned road near Elmira arose we are told from rotten ties which allowed a displaced rail to throw the engine off the track. This catastrophe might probably have been avoided altogether had the road bed been more thoroughly examined just as its mortality to the passengers was prevented by other precautions, to which we shall presently advert. We are aware of the difficulties against which our railroad companies have to contend and appreciate the efforts making to meet the demand for rapid and cheap transportation of passengers and merchandize. We do not urge the adoption of such legislation as would fetter the railroad companies or hinder any well devised efforts they may contrive to fulfil their important duties to the community, but we would urge on them the necessity of adopting voluntarily every well-tested improvement tending to prevent loss of life, knowing as we do that if omitted such expedients will before long be enforced by public opinion and by law.

But the precautionary measures should not stop at the security of the road bed and the prevention of collision between trains traversing it, for after we have put in operation the most approved preventives with the greatest possible care accidents will sometimes occur, and our railroad companies must see to the safety of the passengers whose lives are entrusted to their keeping by adopting any improvements in the construction of their cars which may conduce thereto. In this point of view there are two principal dangers which have to be guarded against—the “telescoping” of cars into each other in case of collision, and the falling of passengers in passing from car to car when the train is in motion. At the last session of the Legislature of this State a law was introduced to guard against the latter of these two evils, and it was finally passed on the 22d of April last. The provisions of this statute are not generally known. We therefore give them from an official copy of the law as follows:

SECTION 1. It shall be the duty of every railroad company or corporation in this State, and every railroad company or corporation running, or that may hereafter run its passenger cars in this State, to cause the platforms upon the ends of all passenger cars to be so constructed that when said cars shall be coupled together, or made up into trains and in motion, danger of injury to persons or loss of life between the ends of said cars, by falling between the platforms of said cars while passing from one car to another, shall, so far as practicable, be avoided.

Sec. 2. This act shall not operate or be construed to exempt railroad companies or corporations from liability for damages to persons who may be injured or sustain loss or damage by or through any neglect to comply with the provisions of this act.

Sec. 4. Time shall be allowed to all railroad companies or corporations to comply with the provisions of this act as follows, to wit: One quarter of all the said cars of each of said companies or corporations shall be made to conform to the requirements of this act within three months from and after the passage of this act, one other quarter thereof within six months, one other quarter thereof within nine months, and the remaining one quarter thereof within one year from and after the passage of this act.

Several plans have been adopted and brought into use for complying with this law. That which seems to be regarded with the most favor as best meeting the conditions of the problem is known as the Miller platform, which some eighteen months ago was adopted by the Erie railroad, and is now being introduced, we believe, by the Hudson River road in this State, as well as on several Western roads.

This new coupling apparatus unites the ends of the cars so that only a few inches intervene between the two contiguous "platforms" however rapidly the cars are travelling. It is also adjusted to prevent the dangerous swaying motion, and while it grasps the cars so firmly together that a force of 7,000 pounds cannot tear them asunder, it is so elastic that there is no more than the average loss from "slippage," and no force that has yet been applied has ever caused them to telescope into each other. To the safety conferred by this apparatus was ascribed the fact that during the past eighteen months no passenger's life has been lost on the Erie railroad, and in the recent accident to which we have referred above not a single passenger was hurt although the train was going at full speed at the time.

DEBT AND FINANCES OF SAN FRANCISCO.

The public debt of San Francisco, as stated in the report of the City Auditor, at the end of the fiscal year 1865-66, and as it stood on the 9th April, 1867 (according to a special statement furnished us by the same gentlemen), is shown in the following statement :

Description of securities.	Interest		Principal payable.	Am't outstanding—	
	Rate.	Payable.		July 1, '66.	Apr. 9, '67
City Bonds of—					
1851.....	10	May & Nov.	May 1, '71	\$1,989,900	\$1,987,900
1854*.....	10	Jan. & July.	Dec. 1, '66	174,500	
1855*.....	6	" "	Jan. 1, '77	306,500	\$70,500
City & County Bonds of—					
1858.....	6	Jan. & July.	Jan. 1, '88	1,133,500	1,133,500
1860 (School)*.....	10	" "	July 1, '70	55,500	54,500
1861 (").....	10	" "	July 1, '70	18,000	15,000
1851 & '63 (S. F. & S. J. RR.).....	7	Various.	Var. '77-'78	800,000	\$77,000
1863 (Judgment).....	7	Ap'l & Oct.	Oct. 1, '83	917,886	863,000
1864 (").....	7	June & Dec.	June 1, '84	28,008	28,000
1864 (Can. Pac. RR.).....	7	Jan & July	July 1, '94	400,000	400,000
1866 (West'n Pac. RR.).....	7	May & Nov	May 1, '96	260,000	260,000
1866 (School).....	7	Ap'l & Oct.	April 1, '81	75,000	60,000
1867 (").....	7	" "	" "	.....	300,000

The interest and principal of the bonds marked thus (*) are payable in gold by Messrs. Lees & Waller in New York. All others are payable in San Francisco.

The coupons of the bonds of 1858, the judgment bonds of 1863 and 1864, and the school bonds of 1866, are receivable for taxes of the current year.

The amount of debt July 1, 1866, as above.....	\$4,947,324
Coupons then due and not presented.....	68,420
Total amount of indebtedness.....	\$5,015,714
Sinking and other funds, per contra.....	1,183,916
Net amount of debt.....	\$3,831,798

The receipts and expenditures for the fiscal year 1865-'66 were as follows :—

RECEIPTS.

Assessed taxes.....	\$1,361,876 28
Poll tax—General fund.....	\$13,170 84
" School fund.....	2,814 75
State and county licences.....	68,233 25
Municipal licences.....	23,799 25

Harbor dues	30,136 58
Fines	41,970 65
Sales of property	4,100 55
" bonds (school)	\$61,050 00
Rents (school)	1,225 50
Sundries (school)	610 75— 62,886 25
Total on all accounts	\$1,024,408 06

EXPENDITURES.

Current expenses	\$1,065,941 96
Paid by fees	\$116,977 86
Returned by state	52,029 63— 100,007 51—\$916,934 45
Permanent improvements	93,145 90
Sales of property	7,150 00— 90,955 90
Interest on debts	393,376 71
Sinking funds, &c.	139,078 32— 256,198 33
Reduction of debt	154,055 00
Old claims	19,097 47
Net payments	\$1,457,361 20
Paid with means obtained from other sources than per contra	815,228 84
	\$1,732,517 04

The rates of taxation (cents per \$100) in the city and county, since the consolidation of 1856, for state as well as local purposes, are shown in the following statement:—

For what purpose.	'56-'7	'57-'8	'58-'9	'59-'60	'60-'1	'61-'2	'62-'3	'63-'4	'64-'5	'65-'6	'66-'7
State	70	70	60	60	60	62	77	90	125	118	113
General fund	125	125	125	65	75	75	70	42½	61	70	67½
Street light fund	—	—	—	15	15	15	7½	7½	7½	7½	15
Street department fd.	—	—	—	—	—	—	—	—	—	10	4½
School fund	25	25	25	25	25	25	25	20	25	25	25
Corporation debt fund	—	—	25	95	100	100	55	45	47	48	26½
Int. (S.F. & S.J. RR)	—	—	—	—	—	—	—	5	2½	2	—
" (bonds of '61-'64)	—	—	—	—	—	—	—	—	17½	10	—
" (Pacific RR. bds)	—	—	—	—	—	—	—	—	—	8	—
Sky. fd. (bonds of '55)	—	—	—	—	—	—	—	—	2	3	5
" ('63-'4)	—	—	—	—	—	—	—	—	8	7½	7½
" (S.F. & S.J. RR bds)	—	—	—	—	—	—	—	—	—	—	—
" (Pacific RR bds)	—	—	—	—	—	—	—	—	—	1	—
Judgment fund	—	—	—	46	—	—	—	—	—	—	—
Total (cts. p \$100)	320	320	245	316	285	267	274½	210	268	312	310

RAILROADS OF THE WORLD.

The following statement, which we have compiled from the most authentic sources accessible, shows the length of railroad constructed and in operation at the end of 1866 in each country into which they have been introduced, and their relation to the extent and population of the countries respectively. We believe it to be as nearly accurate as it is possible to make such a summary :

Countries.	Miles of railroad.	Area, sq. m.—		Population.—	
		Absol'te.	To mile of R. R.	Absol'te.	To mile of R. R.
NORTH AMERICA:					
Canada	2,148.5	267,222	166	3,091,440	1,439
New Brunswick	198.2	27,704	140	295,081	1,439
Nova Scotia	92.8	13,746	202	263,731	2,974
United States	36,896.3	2,001,029	51	36,966,300	1,000
Mexico	78.8	772,672	9,369	3,269,080	105,480
WEST INDIES:					
Cuba	396.5	47,278	119	1,419,364	3,659
Jamaica	13.8	6,250	453	441,364	195
SOUTH AMERICA:					
Venezuela	22.0	426,700	12,334	1,565,000	43,905
New Granada	47.5	521,900	10,937	2,797,473	58,804
British Guiana	59.9	96,800	1,608	155,026	2,533

Countries.	Miles of railroad.	Area, sq. m.		Population.	
		Absol'te.	To mile of R.R.	Absol'te.	To mile of R.R.
Brazil.....	483.3	2,973,400	68,599	10,045,000	22,198
Paraguay.....	46.9	86,800	1,866	1,337,431	23,985
Peru.....	55.3	498,700	9,019	2,600,000	45,300
Chili.....	386.7	949,900	743	1,714,319	5,091
Argentine Republic.....	331.0	1,124,300	4,976	1,459,355	6,319
EUROPE:					
Gr. Britain & Ireland.....	13,286.0	122,550	9	29,070,986	2,189
France.....	8,962.5	213,300	24	37,473,723	4,172
Spain.....	3,116.4	189,550	60	16,081,867	5,144
Portugal.....	488.3	35,350	81	3,987,861	9,386
Switzerland.....	594.2	15,370	18	2,510,494	2,167
Italy.....	3,218.2	109,730	34	24,269,684	7,553
Austria.....	3,530.9	940,260	69	23,578,009	3,608
W. Germany (elsew'e).....	2,540.1	44,580	17	8,523,460	2,955
Prussia.....	5,794.3	125,400	23	22,577,939	4,063
N. Germany (elsew'e).....	1,093.5	34,677	23	5,610,394	5,198
Belgium.....	1,635.1	11,400	7	4,940,570	2,099
Holland.....	700.7	13,600	19	2,738,623	5,386
Denmark.....	293.1	11,730	50	1,908,095	6,451
Sweden.....	1,023.4	170,099	166	4,114,141	4,081
Norway.....	48.5	123,228	2,381	1,701,478	3,911
Russia.....	2,775.2	1,565,300	564	65,868,181	20,734
Turkey in Europe.....	170.6	303,830	1,189	15,700,000	91,713
ASIA:					
Turkey in Asia.....	142.9	668,990	4,608	16,000,000	111,906
British India.....	3,379.1	1,465,300	48	180,500,000	53,418
Java.....	101.4	51,800	508	13,917,000	12,734
Ceylon.....	86.9	24,660	616	2,343,098	63,670
AFRICA:					
Egypt.....	281.3	659,000	2,345	7,465,000	26,620
Algeria.....	27.7	85,800	308	2,000,000	108,300
Cape Colony.....	84.5	104,980	159	267,100	4,140
Natal.....	2.0	14,400	7,300	156,300	73,100
AUSTRALASIA:					
Victoria.....	331.5	86,940	263	874,331	1,723
New South Wales.....	145.5	323,457	2,230	873,935	2,613
South Australia.....	73.5	363,398	5,315	140,416	1,900
Queensland.....	41.3	618,000	15,996	59,714	1,449
New Zealand (Canterbury).....	16.5	106,329	6,440	175,337	10,637

The following is a recapitulation of the above table, so far as length of railroad is concerned; but as relates to area and population, substituting the total of each grand division for those of the countries named above:

Divisions.	Miles of railroad.	Area square mile.		Population.	
		Absolute.	To mile of R.R.	Absolute.	of R.R.
North America.....	139,414.1	7,600,000	193.8	52,000,000	1,209.8
West Indies.....	410.3	100,000	243.7	2,600,000	3,539.3
South America.....	1,041.9	7,100,000	6,514.4	22,500,000	21,593.1
Total America.....	40,866.3	14,800,000	363.1	78,000,000	1,908.6
Europe.....	60,117.5	8,600,000	71.8	295,000,000	5,694.6
Asia.....	3,680.3	17,400,000	4,753.7	780,000,000	213,097.3
Africa.....	375.4	11,700,000	31,166.7	200,000,000	532,765.1
Australasia.....	607.7	8,200,000	5,365.7	1,600,000	2,629.8
Total of world.....	96,727.2	50,700,000	530.2	1,844,600,000	13,908.8

IRELAND FOR 1866.

A Parliamentary return, giving information on the subject of agriculture for the year 1866 has just been received, and I extract therefrom such features as seem to have general interest in this country and abroad.

The area under the principal cereal crops in 1866, which amounted to 2,159,199 acres, decreased by 40,211 acres compared with 1865; and the dimi-

nution in the average yield per acre was: In wheat, 1.7 cwt.; oats, 0.3 cwt.; rye, 0.1 cwt. Barley and bere gave an increase yield, the former of 0.8 cwt. and the latter of 0.5 cwt. per acre. The cereal crops (wheat, oats, barley, bere and rye) produced 8,776,262 quarters, being a net falling off in the yield of 474,618 quarters in 1866 compared with the previous year. This was owing not only to a diminished acreage, but also to a decrease in the estimated average acreable yield in 1866.

In green crops there was an increase in the produce of turnips, mangel wurzel and cabbage, but a large decrease in the yield of potatoes. Taken together, potatoes, turnips, mangel wurzel and cabbage in 1866 produced 7,487,741 tons, showing a net deficiency in the total yield from these crops of 222,121 tons compared with the previous year. This was caused by a decrease in the acreage under potatoes and also by a considerable diminution in the yield of that crop, amounting to seven-tenths of a ton per acre.

Flax, notwithstanding a less acreable yield, shows a greater total produce of 1,430 tons. This is due to an increased area of 12,074 acres in 1866. Hay exhibits a decrease in acreage of 77,070 acres. We present a table giving the total extent under each of the principal crops in 1865 and 1866, and the increase or decrease in the latter year.

Crops.	Extent Cultivated in—		Inc. or Dec in 1866.	
	1865. Acres.	1866. Acres.	Increase. Acres.	Decrease. Acres.
Wheat	260,989	299,190	38,201	.....
Oats	1,745,228	1,699,195	.....	45,538
Barley	177,102	150,298	.....	26,809
Bere and Rye	10,091	10,021	.....	70
Potatoes	1,066,960	1,050,358	.....	15,907
Turnips	324,212	317,198	.....	17,014
Mangel Wurzel	14,889	20,063	5,693	.....
Cabbage	36,623	36,581	2,909	.....
Flax	251,433	263,507	12,074	.....
Hay	1,973,493	1,601,423	.....	77,070
Total decrease				129,526

The economical changes which have taken place in Ireland even since 1857 may be perceived at a glance by comparing the estimated total produce of that year with that of 1865 and 1866. The great decrease in the cultivation of wheat and the great increase in that of flax seem to be the most noticeable features:

Crops.	Estimated Produce.			Inc. or Dec. 1866.	
	1857. Quar.	1865. Quar.	1866. Quar.	Inc. Quar.	Dec. Quar.
Wheat	1,693,937	823,783	805,710	.....	21,073
Oats	8,895,847	7,659,737	7,394,335	.....	874,892
Barley	849,733	732,017	654,390	.....	77,037
Bere	23,558	12,989	11,016	.....	2,973
Rye	49,253	8,364	19,731	1,257	.....
Potatoes	3,509,544	2,865,990	2,063,594	.....	797,896
Turnips	4,360,197	2,301,633	2,736,463	434,779	.....
Mangel Wurzel	295,515	191,967	260,322	53,575	.....
Cabbage	337,875	330,253	332,363	32,111	.....
Flax	14,475	39,561	40,991	1,430	.....
Hay	2,564,644	2,063,707	2,373,623	.....	190,085

The interruption of the cotton supply in 1861-2 gave an impetus to the cul-

ture of fax in Ireland. This impetus is measured by the number of scutching mill's in operation in 1866 as compared with the number in 1861 :

Provinces.	1861.	1866.
1—Ulster.....	1,018	1,303
2—Leinster.....	18	49
3—Munster.....	7	39
4—Connaught.....	4	32
Ireland	1,037	1,513

The number of emigrants who left the Irish ports in 1866 was 101,251, being a decrease of 1,845 on the returns for 1865.

The number of males who emigrated in 1866 was 60,688, being an increase of 4,482 over the previous year. Of females there were 40,563, being a decrease of 6,327 compared with 1865. The suspension of the habeas corpus act doubtless accelerated the emigration of the male part of the population. We present a table showing the numbers contributed by each province to the aggregate emigration :

Emigrants from Provinces.	Males.		Females.		Total.	
	1865.	1866.	1865.	1866.	1865.	1866.
Leinster.....	11,050	9,915	9,461	7,464	20,521	17,379
Munster.....	10,490	21,359	16,936	15,612	27,426	36,971
Ulster.....	12,744	17,802	9,557	8,467	22,301	26,269
Connaught.....	6,189	6,725	6,363	5,714	12,477	12,429
From what province not stated.....	4,782	3,700	3,967	2,659	8,769	6,419
Persons belonging to other countries.....	192	1,197	807	657	1,599	1,784
Total.....	53,206	60,688	46,890	40,563	100,096	101,251
	Increase. 4,482		Decrease. 6,327		Decrease. 1,845	

Increase or decrease in 1866

Of the 1,784 emigrants from Ireland not belonging to Ireland, 1,073 were natives of South Britain, 604 of North Britain, 49 of the Continent of Europe, 55 of the United States, Canada and the West Indies, and three of Africa, Australia and the East Indies.

In respect to age, nearly 75 in every 100 of the persons who left Ireland were between 15 and 35 years of age. In 1865 the proportion per cent for these ages was 64.7.

The same Parliamentary return gives information on the meteorological phenomena of Ireland, as registered at the Ordnance Survey Office in Phoenix Park. Height above the sea, 158.8 feet. The barometer stood highest in 1866, on the 24th of January, at 9:30 A. M.—wind S.W.—when it was 30.673 inches; it was lowest at 9:30 P. M. on the 23d March—wind S. E.—when it was 28.663 inches. The highest temperature in the air during the year was 80.7 degrees of Fahrenheit, on the 13th of July, and the lowest 17.5 degrees, on the 1st of March. Rain or snow fell on 216 days. The greatest quantity of rain which fell in a day (twenty-four hours) was 9.75 inches, on the 18th of June—the wind being N. W. The point from which the wind chiefly prevailed was from the westward; it blew from that direction 107 days, with an average pressure 2.83 lbs. per square foot. The strongest wind was from the S. W., on the 6th of December, when the pressure was 25 lbs. per square foot.

LOYD'S LIST OF WRECKS AND CASUALTIES.

The "Committee for Managing the Affairs of Lloyd's," in London, appointed a Statistical Committee in March, 1866, who have lately published their "First Annual Analysis of the Wrecks and Casualties reported in *Lloyd's List* for the year 1866." The object of the publication, which will hereafter appear annually, is to present a comprehensive and careful summary of losses and casualties, containing all available information relating to accidents; and the work cannot fail to be of value to all parties interested in the mercantile marine of the world. The date of its first report is 23d April, 1867, in the preface to which it is stated "that the results of casualties as at first stated are very frequently modified by subsequent events, of which information is only obtained after greater or less intervals, and that a period of three months is allowed to elapse for the purpose of securing all possible accuracy."

It appears from the monthly summary of "Wrecks and Casualties" reported in *Lloyd's List* as having occurred in 1866, that they were as follows:

Wrecks—Ships	9,558	Casualties—Ships.....	10,637
Steamers	1,039—10,587	Steamers	1,064—11,711

The results of wrecks to the vessels were:

	Ships.	Strs.		Ships.	Strs.
Total loss.....	2,119	115	Minor damage.....	4,069	354
Constructive loss.....	163	7	Raised after sinking.....	44	8
Great damage.....	1,196	99	Not damaged, or results unknown	1,874	446

The results to cargoes, so far as reported, were:

	Ships.	Strs.		Ships.	Strs.
All lost.....	1,873	71	Heated.....	20	..
Part lost.....	639	50	Shifted.....	111	6
All saved.....	63	5	Otherwise damaged.....	218	36
Forwarded.....	74	13			

The number of salvage cases were: ships, 1,264, and steamers, 116. So far as reported, the lives lost were 2,644.

An elaborate tabular analysis of the wrecks is also given, divided into thirty-one geographical sections, with the remark that "the arrangement followed is that of voyages between the ports within the several sections and the United Kingdom and Continent of Europe (between Bordeaux and Hamburg, both included), and does not necessarily indicate the locality of the casualty." With this explanation we subjoin two of the sections:

—United States, from Matamoras— (exclusive) to New Brunswick (exclusive).					—British North America.—				
	To	From	Coasters.	Cross Voy-ages to.	To	From	Coast-ers.	Cross Voy-ages to.	
Total loss.....	Ships 33	45	16	41	35	34	65	41	
Steamers.....	..	3	4	..	1	..	4	2	
Constructive loss	Ships 7	5	1	19	4	6	6	3	
Steamers.....	..	..	..	..	..	..	..	..
Great Damage...	Ships 47	13	3	50	13	26	8	13	
Steamers.....	..	1	..	..	..	..	2	..	
Minor Damage...	Ships 155	69	6	147	63	61	6	17	
Steamers.....	..	7	3	1	2	3	1	..	
Raised after sink- ing.....	Ships .... ..	..	3	..	..	..	..	..
Steamers.....	..	..	..	..	..	..	..	..
Not damaged or results unknown	Ships 29	37	4	50	15	34	25	16	
Steamers.....	..	9	5	3	3	1	3	..	
Totals.....	Ships 370	179	33	307	129	159	113	90	
Steamers.....	..	19	11	4	5	5	10	3	

But, besides the exceedingly valuable series of tables, of which we have here made a very imperfect summary, there is a statement given showing that the whole number of "Casualties" posted in *Lloyd's Loss Book* during each of ten years were:

Year.	Casualties.	Year.	Casualties.
1857.....	3,318	1863.....	3,068
1858.....	3,171	1864.....	3,906
1859.....	3,768	1865.....	3,306
1860.....	3,539	1866.....	3,947
1861.....	3,673	1866.....	3,870
Total in decade.....			34,431
Average in each year.....			3,443.1

It will be observed that the casualties in each of the years 1859, 1860, 1861, 1862 and 1863 were much more numerous than in 1866; while those in 1857, 1858, 1864 and 1865 were considerably less. The reports by months show the following results:

	Total for 10 years.	Average per month.		Total for 10 years.	Average per month.
January.....	4,097	409.7	July.....	1,638	163.8
February.....	2,975	297.5	August.....	1,690	169.0
March.....	3,009	300.9	September.....	1,807	180.7
April.....	2,366	236.6	October.....	3,831	383.1
May.....	1,985	198.5	November.....	4,633	463.3
June.....	1,683	168.3	December.....	4,341	434.1

This table shows that the greatest number of reported casualties occurred in the months of November, December and January; the months next in order being October, March and February; the smallest proportion in May, June, July and August. The following analysis shows the ratios:

During November, December and January.....	13,960	Casualties, or	37% per cent.
" October, March and February.....	9,516	"	28% "
" September and April.....	4,573	"	13% "
" May, June, July and August.....	7,063	"	20% "
	35,112		100

The document from Lloyd's, to which we have in this summary way called our readers' attention, will, we expect, be improved in some of its features before the time for another issue comes round; and it will be looked forward to with interest as years impart additional value and importance to it. It may not be out of place here to say that while the geographical arrangement, so far as it goes, is a desirable one, an attempt might be made to tabulate the regions where wrecks and casualties happen. For example, one region might be the Gulf and River St. Lawrence, another the North Atlantic coast, a third the West Indies and Gulf of Mexico, a fourth the channels and coasts of Great Britain, &c., limiting the regions to perhaps less than one-half the number of the geographical sections. The labor incident to this addition to the report would indeed be considerable, but its enhanced value to underwriters, ship owners and shippers would compensate for it all; while the mercantile classes would reap the advantages accruing from the modification of rates of insurance which such an arrangement might eventually lead to.

COMMERCIAL CHRONICLE AND REVIEW.

Public Debt Statement—Conversion of Seven-thirties—Crops and Business—Rates of Loans—
Stock Exchange—Prices of Governments—Amount of Coin—Course of Gold, &c.

No statement of the public debt has been published this month, and it is impossible to say precisely what progress the Secretary has made in his funding operations. Enough is known, however, to lead to the conclusion that they are going forward satisfactorily, and that the aggregate of compound notes and of Seven-thirties has received a considerable diminution. As to the compound notes, the amount maturing is so limited as to be easily manageable, especially in view of the large balance in the Treasury, and of the heavy receipts this month from income tax and internal revenue. Hence, the three per cent. certificates will not need to be issued in exchange for compounds during July nor perhaps in the month of August. As to the Seven-thirties, we have repeatedly shown that it is so much the interest of the holders to convert them into gold-bearing bonds, that we shall not be surprised if, during the next six months, they should disappear from the debt statement almost altogether. Of these notes it will be remembered there are three series. Several weeks ago a controversy arose relative to the first series maturing in August next, of which 130 millions were outstanding at the beginning of May, and about 90 millions on the 1st of June. These notes are dated 15th August, 1864, and call for 7.30 per cent. interest in currency during three years from their date. The controversy originated from the fact that at maturity all the Seven-thirties are convertible at par into Fifty-two gold bearing bonds at the option of the holder. This option gives the notes a value beyond that of an ordinary short security, and causes them to sell in the market at as high a premium as the long gold-bearing Fifties themselves. The question raised had regard to the option which confers on these notes their special value. By one party it was contended that the option did not lapse at the date of the maturity of the note, but survived in such a way that at any time after the fifteenth of August the holder could present his note at the Treasury and demand either cash or a bond at his pleasure. One of the inconveniences of this arrangement would have been that capitalists could combine together to hold a large amount of Seven-thirties, should some unforeseen trouble invade the money market, and could demand payment in cash at any time hereafter. Hence the Treasury would be compelled to keep on hand, at great cost to the country for interest, a large amount of currency for the specific purpose of paying off these matured notes. And the speculators who imposed this permanent and mischievous necessity on the Treasury could do it without the sacrifice of the option to demand bonds in exchange for their notes if at any subsequent date such a conversion might be to their interest. Other objections were urged to this view of the case, which were subjected to discussion in Wall street. In view of all the facts we ventured to refute the prevalent opinion, and urged that the holders of August notes would do well to convert them before maturity into bonds. We called attention to the fact that as each Seven thirty note bears on it the express condition that it is convertible "at maturity," the privilege of

conversion must expire by its own limitation on the day the note matures, adding that in a few weeks the Department would probably announce that all August notes not converted at maturity would be treated as the other matured obligations of the Government, would cease to bear interest, and would be paid off at par. This argument has turned out to be correct. For a few days ago the notice was semi-officially issued, and there is now no doubt that such August Seven-thirties as are not presented at the Treasury on or before August 15th, will lose their privilege of conversion, will be paid off in cash, and will consequently fall to par in the market. Of course these regulations do not as yet affect the June and July Seven-thirties which mature next year.

So great are the anomalies which have marked the course of business in all classes of securities, except Government bonds, that during the past six months the remark has been on almost every one's lips that the thinkers have been losers, while the men who have followed the instincts and impulses of the moment have almost invariably grown rich by their operations, or have, at least, avoided serious loss. In the face of an inflated currency, low prices have ruled steadily; and though all descriptions of negotiable securities have confessedly been offering in the market far below their intrinsic worth, still the sellers have been more urgent than the buyers; the speculative feeling seemed extinguished; and all those forces which tend to put up quotations suffered from temporary paralysis. In looking back, it is easy to select and point out some of the causes to which this long reign of depression is due. Business in all departments has been dull and unremunerative; we have had three successive bad harvests; a vast aggregate of money has been lost by people in all parts of the country whose ordinary prudence had unhappily been silenced by the desire to grow suddenly rich, and who have ventured greater or smaller sums in speculative purchases of petroleum, manufacturing, or mining stocks, which soon became either altogether unsaleable, or could only find purchasers at a price scarcely covering the interest on the original purchase money. In our hotels and railroad cars, in our merchant's offices and our banks—wherever we make the inquiry in our chief cities—we find it not difficult to meet with men who have directly or indirectly suffered from the collapse of some of the ten thousand companies with whose prospectuses all parts of the country were inundated two or three years ago. The great reservoir of the public wealth has thus been depleted in two ways. First, through the failure of the crops, by which our people generally have been more or less impoverished; and, secondly, by extravagant speculation, which has reduced multitudes to indigence, and has made almost every one "feel poor," which in its effects on business is as bad as being poor. When to these circumstances we add the pressure of a galling burden of ill-adjusted taxation which our young giant nation has scarcely accustomed its shoulders to bear, and the prodigal habits of domestic expenditure which have grown up and have conferred on us at home and abroad the reputation of being the most extravagant and profuse, as well as the most energetic and enterprising nation in modern Christendom, we shall show some of the reasons, though only a small part of the reasons for that languor that has seized us, and has diffused it cataleptic oppressive torpor over so large a part of our productive energies.

If in the long depression which has prevailed in Wall street, we see reflected

the mercantile and financial gloom under which the whole nation has suffered, shall we not see in the improvement that is now developing itself at the Stock Exchange, a bright promise of good which is to overspread the whole country? It is not without significance that at the London Stock Exchange an improvement is apparent, quite as marked and as unexpected as that we note here. A recent number of the London *Economist* refers to it in the following terms:

The rise in prices during this week and last has puzzled some people, and especially, perhaps, those who have given some attention to philosophical principles, but have not thought the subject quite out. It is generally imagined that some physical quantity—supply, and some other almost mechanical entity, demand, determine price, and rightly understood, we believe, supply and demand *do* determine price, but the sense in which they do so requires a very nice and delicate exposition, which we cannot go into here. The material point for the present purpose is this: that the circumstances which act on price are quite as much mental as material. A person who thinks prices are going to rise, he goes and buys, and by his application to buy he raises or tends to raise the price. Just so a person who thinks prices are about to fall is apt to sell, and by so selling he reduces or tends to reduce the price of the article. It cannot be put too strongly that price is an affair of the *nerves* as much as it is an affair of anything.

It is certain, we believe, that the great rise in the shares of the London and Westminster Bank, though caused by a special fact which every one knew, *did* tend to raise the price of everything else. It made people feel more cheerful; it produced the effect of a great splash in a dull pool; it woke up peoples minds, and made them think things would be different.

The great rise in Consols, which has ruined one or two small dealers, is not to be wondered at. They rose more rapidly in value both after 1847 and 1857, than after 1866. And it is more reasonable that in a depression of prices which arises from distrust, those things which are least to be disturbed should sink least at first, and should rise soonest from the common fall.

It is far from our intention to encourage inordinate hopes, or to countenance a speculative reckless spirit among our mercantile classes. The object we have in view will be accomplished if we induce some of our desponding readers to look more hopefully for the turn of the tide, when legitimate risks and mercantile ventures, which would have been rash in the extreme a few months ago may be less perilous, or may be embraced within the limits of prudence and sound business policy.

June has been characterized by a general improvement in the tone of business. The encouraging crop prospects have proved most opportune to the drooping confidence of merchants. It is felt that there is now a solid basis for hopes of improvement, and both in financial and trading circles there is a relaxation of the extreme caution which for months past has paralyzed business. But, with reviving hopes, there is no general disposition to run into excesses. The severe experience of late months have left many with diminished means for carrying on business, while it has sobered all and produced a general disposition to trade prudently.

If we do not misinterpret indications, there is a liability on the part of manufacturers to regard the crop prospects as demanding a large supply of goods. In this city there are large stocks in the hands of commission agents, and reports from New England and Pennsylvania state that heavy stocks are piled upon the factories. Some of the manufacturers are using this glutted condition of the market as an argument with their hands for a reduction in wages, but none ap-

pear to favor the policy of curtailing production. Applications are made at the banks of this city for advances upon manufacturers' stocks to an extent unusual at this season of the year. These, with other facts, would seem to indicate a strong probability that the supply of domestic goods for the Fall trade will be unusually ample. Under these circumstances there would seem to be little reason in the hope entertained among manufacturers that an active business in the Fall will induce an advance in prices.

The course of the money market during the month has not realized the general expectation. The large withdrawals of currency into the treasury, the payment of income tax, and the preparation for the quarterly statements of the banks, made up on the 1st of July, were relied upon as almost certain to induce a decided stringency in the market toward the close of June. On the contrary, the market has steadily increased in ease, and at the close of the month demand loans were 1 per cent. lower than at the opening.

The following are the rates of loans and discounts for the month of June :

RATES OF LOANS AND DISCOUNTS.

	June 7.	June 14.	June 21.	June 28.
Call loans	7 @ -	7 @ -	6 @ -	4 @ 6
Loans on Bonds and Mortgage	6 @ 7	6 @ 7	6 @ 7	6 @ 7
A 1, endorsed bills, 2 mos	7 1/2 @ 8	7 @ 8	7 @ 8	6 1/2 @ 7
Good endorsed bills, 3 & 4 mos	7 1/2 @ 9	8 @ 9	8 @ 9	7 @ 8
" " single names	9 @ 10	9 @ 10	9 @ 10	9 @ 10
Lower grades	10 @ 15	11 @ 15	11 @ 15	11 @ 15

The expectation of a close money market at the end of the month induced a large "short" interest in the stock market; but the disappointment of the expectation naturally induced a sharp upward movement, based upon the oversold condition of the market. Large amounts of shares changed hands toward the close of the month, and the aggregate transactions for June, at the boards, were ran up to 1,822,730 shares, against 1,573,220 for the same period of last year. The total sales at both boards for the first six months of the year amount to 11,339,859 shares, against 12,014,197 for the corresponding period of 1866.

The following table shows the volume of shares sold at the New York Stock Exchange and Open Boards in each month and the half year, since January 1:

VOLUME OF SHARES SOLD AT THE STOCK BOARDS, JUNE, 1867.

	January.	February.	March.	April.	May.	June.	Since Jan. 1.
Bank shares	2,461	1,989	2,425	2,518	4,051	2,584	18,968
Railroad "	2,900,519	1,283,251	1,507,017	1,868,205	1,448,041	1,554,112	9,830,186
Coal "	24,288	10,869	33,145	8,868	7,615	9,593	98,205
Mining "	65,875	29,980	23,503	36,069	18,080	26,266	218,045
Improv'nt "	20,244	18,960	41,975	20,000	41,900	21,725	184,704
Telegraph "	49,501	22,897	24,615	57,975	42,971	53,172	271,081
Steamship "	56,504	91,618	80,561	78,087	61,180	76,654	444,556
Expr's &c "	4,708	6,409	6,563	12,126	24,411	67,941	122,154
At New York Stock Ex.	785,859	624,121	673,926	820,157	642,614	611,580	4,148,737
At Open B'd.	1,658,295	841,242	1,153,976	1,393,484	1,096,085	1,211,150	7,192,109
Total 1867.	2,443,654	1,475,363	1,827,902	2,213,641	1,678,699	1,822,730	11,339,859
Total 1866.	2,459,517	1,742,421	1,993,830	1,754,489	2,514,451	1,573,220	12,014,197

Government securities have continued in very active demand from the interior, while moderate shipments of Five-twenties have been made to the interior the result having been a general advance in prices.

The amount of Government bonds and notes, State and city bonds and company bonds, sold at the Stock Exchange Board in the two first quarters and the month of June, and the total, since January 1, is given in the table which follows:

	1st quarter.	2d quarter.	June.	S'ce Jan. 1.
United States bonds.....	\$18,703,650	\$40,888,850	\$14,043,750	\$59,091,000
United States notes.....	4,792,480	3,847,600	1,088,850	8,140,080
State and city bonds.....	8,894,100	7,601,650	2,626,950	16,453,750
Company bonds.....	2,216,900	2,307,700	797,000	4,553,900
Total 1867.....	\$34,585,430	\$53,705,800	\$18,556,050	\$98,900,730
Total 1866.....	33,600,540	35,414,850	13,078,750	69,014,890

The following are the closing quotations at the regular board on Friday of each of the last seven weeks.

	May 17.	May 24.	May 31.	June 7.	June 14.	June 21.	June 28.
Cumberland Coal.....	30	30	30	30	30	30	33
Quicksilver.....	27	25	25	25	28	27	31
Canton Co.....	41	41	43	43	43	43	47
Mariposa pref.....	17	17	17	20	20	19	21
New York Central.....	97	97	98	100	101	103	104
Erie.....	63	58	58	60	60	59	65
Hudson River.....	100	100	100	100	100	100	100
Reading.....	103	103	103	105	106	107	109
Michigan Southern.....	67	66	66	68	68	70	78
Michigan Central.....	100	100	100	111	113	x.d107	110
Cleveland and Pittsburg.	78	71	75	76	76	77	84
Cleveland and Toledo....	113	113	113	119	118	120	130
Northwestern.....	84	81	83	84	84	85	82
" preferred.....	89	86	87	88	89	89	85
Rock Island.....	88	87	87	83	80	80	85
Fort Wayne.....	96	95	96	99	97	98	103
Illinois Central.....	114	115	115	119	119	120	131

The daily closing prices of the principal government securities are shown in the following statement:

PRICES OF GOVERNMENT SECURITIES AT NEW YORK, JUNE, 1867.

Day of month.	6's, 1881.	6's, (5-30 yrs.)	1863.	1864.	1865.	new.	5's, 10-40 yrs.	7-30's
Saturday 1.....	111	108	106	106	106	106	99	106
Sunday 2.....	111	108	106	106	106	106	99	106
Monday 3.....	111	107	106	106	106	106	99	106
Tuesday 4.....	112	107	106	106	106	106	99	106
Wednesday 5.....	112	108	106	106	106	106	99	106
Thursday 6.....	112	108	106	106	106	106	99	106
Friday 7.....	112	108	106	106	106	106	99	106
Saturday 8.....	112	108	106	106	106	106	99	106
Sunday 9.....	112	108	106	106	106	106	99	106
Monday 10.....	112	108	106	106	106	106	99	106
Tuesday 11.....	112	108	106	106	106	106	99	106
Wednesday 12.....	112	108	106	106	106	106	99	106
Thursday 13.....	112	108	106	106	106	106	99	106
Friday 14.....	112	108	106	106	106	106	99	106
Saturday 15.....	112	108	106	106	106	106	99	106
Sunday 16.....	112	108	106	106	106	106	99	106
Monday 17.....	112	108	106	106	106	106	99	106
Tuesday 18.....	112	108	106	106	106	106	99	106
Wednesday 19.....	112	108	106	106	106	106	99	106
Thursday 20.....	112	108	106	106	106	106	99	106
Friday 21.....	112	108	106	106	106	106	99	106
Saturday 22.....	112	108	106	106	106	106	99	106
Sunday 23.....	112	108	106	106	106	106	99	106
Monday 24.....	112	108	106	106	106	106	99	106
Tuesday 25.....	112	108	106	106	106	106	99	106
Wednesday 26.....	112	108	106	106	106	106	99	106
Thursday 27.....	112	108	106	106	106	106	99	106
Friday 28.....	112	108	106	106	106	106	99	106
Saturday 29.....	112	108	106	106	106	106	99	106
Sunday 30.....	112	108	106	106	106	106	99	106
First.....	111	107	106	106	106	106	99	106
Lowest.....	111	107	106	106	106	106	99	106
Highest.....	112	108	106	106	106	106	99	106
Range.....	1	1	1	1	1	1	1	1
Latest.....	112	108	106	106	106	106	99	106

The quotations for three-years compound interest notes on each Thursday of the month have been as shown in the following statement :

PRICES OF COMPOUND INTEREST NOTES AT NEW YORK, JUNE, 1867.

Issue of	June 6.	June 12.	June 20.	June 27.
June, 1864.....	119½ @ 119½	119½ @ 119½	119½ @ 119½	119½ @ 119½
July, 1864.....	118½ @ 119½	119 @ 119½	119 @ 119½	119 @ 119½
August, 1864.....	118½ @ 118½	118½ @ 118½	118½ @ 119	119½ @ 119
October, 1864.....	117½ @ 118	117½ @ 118	117½ @ 118	117½ @ 118
December, 1864.....	116½ @ 117	117 @ 117½	117 @ 117½	117 @ 117½
May, 1865.....	116 @ 116½	116½ @ 116½	116½ @ 116½	116½ @ 116½
August, 1865.....	115 @ 115½	115½ @ 115½	115½ @ 115½	115½ @ 115½
September, 1865.....	114½ @ 115½	114½ @ 115½	115 @ 115½	115 @ 115½
October, 1865.....	114½ @ 114½	114½ @ 114½	114½ @ 115	114½ @ 114½

The first series of figures represents the buying and the last the selling price, at first-class brokers' offices.

At London the price of United States bonds has ranged between 72½ and 73½ the quotations not having appreciably yielded under an advance of two points in the premium on gold. The reduction in the Bank of England rate of discount has facilitated the carrying of bonds by the London dealers, which doubtless has been one cause of the firmness of prices.

The closing prices of Consols and certain American Securities at London, on each day of the month of June are shown in the following statement :

COURSE OF CONSOLS AND AMERICAN SECURITIES AT LONDON—JUNE, 1867.

Date.	Cons for mon.	American U. S. 5-20s	Ill. C. sh's.	securities. Erie A. & W. sh's.	Date.	Cons for mon.	American U. S. 5-20s	Ill. C. sh's.	securities. Erie A. & W. sh's.
Sat'day. 1.....	96	78½	78½	40½	Wedne. 19.....	94½	73½	79	39½
Sunday. 2.....	—	—	—	—	Thurs. 20.....	94½	73	79	39
Monday. 3.....	94½	78	78½	40½	Friday. 21.....	94½	73	79	38½
Tues. 4.....	94½	78	78½	40½	Sat'day. 22.....	94½	73	79	39
Wedne. 5.....	94½	78	78½	40	Sunday. 23.....	—	—	—	—
Thurs. 6.....	94½	78	79	39½	Monday. 24.....	94	73	79	39
Friday. 7.....	94½	78	78½	39½	Tues. 25.....	94½	73	79½	39½
Sat'day. 8.....	94	78	78½	40	Wedne. 26.....	94½	73	79½	39½
Sunday. 9.....	—	—	—	—	Thurs. 27.....	94½	73	79½	41½
Monday. 10.....	—	(Holi day)	—	—	Friday. 28.....	94½	73	79½	41½
Tues. 11.....	94½	73	73½	40½	Sat'day. 29.....	94½	73½	79½	43
Wedne. 12.....	94½	73	73½	40½	Sunday. 30.....	—	—	—	—
Thurs. 13.....	94½	73	79½	40½	Highest.....	96	73½	79½	43
Friday. 14.....	94½	73½	79½	40½	Lowest.....	94	73	78½	38½
Sat'day. 15.....	94½	73½	79½	40½	Range.....	9	½	1½	4½
Sunday. 16.....	—	—	—	—	Lo. s' e J. 1.....	90	67½	73½	35½
Monday. 17.....	94½	73½	79	40 26	Hi. s' e J. 1.....	96	75½	82½	46½
Tues. 18.....	94½	73½	79	40 26					

The lowest and highest quotations for United States 6's (5-20 years) of 1862, at Paris and Frankfort, in the weeks ending Thursday, have been as follows :

	June 6.	June 12.	June 20.	June 27
Frankfort.....	71½ @ 71½	71½ @ 71½	71½ @ 73	71½ @ 71½

The course of the gold premium has been upward. The advance has followed the reopening of the breach between the President and Congress on the question of reconstruction, and the assembling in Congress in special session. At the same time, the expectation of a short supply upon the market before the next large payment of coupons, in November, has tended to strengthen the premium. The price has ranged during the month between 186½ and 188½.

The import and export of coin and bullion at the port of New York for June and the two first quarters of the current year, and since Jan. 1, have been as shown in the following statement :

IMPORT AND EXPORT OF COIN AND BULLION.

	First Quarter.	Second quarter.	Month of June.	Since Jan. 1.
Receipts from California.....	\$4,109,861	\$3,899,555	\$3,568,778	\$13,009,416
Imports from foreign ports.....	409,077	1,145,913	497,477	1,554,989
Total receipts.....	\$4,518,938	\$5,045,467	\$4,066,256	\$14,564,405
Exports to foreign ports.....	6,503,959	17,653,956	6,343,530	\$4,219,994
Excess of exports.....	\$43,020	\$2,007,490	\$2,283,270	\$2,555,519

The following statement shows the amount of receipts and exports in June and since January 1, for the last seven years :

	California Receipts—		Foreign Imports—		Foreign Exports—	
	June.	Since Jan. 1.	June.	Since Jan. 1.	June.	Since Jan. 1.
1867.....	\$3,523,778	\$13,009,416	\$497,477	\$1,554,989	\$3,248,529	\$34,219,994
1866.....	1,843,971	16,490,947	94,549	1,160,196	15,890,956	45,783,430
1865.....	750,490	8,942,593	236,023	1,063,023	5,199,473	17,906,750
1864.....	732,951	5,933,571	146,781	1,437,014	6,533,109	20,153,131
1863.....	800,176	7,390,913	109,997	853,708	1,597,774	20,631,963
1862.....	1,911,099	11,983,097	61,023	512,465	9,367,614	37,975,397
1861.....	2,013,063	19,130,037	5,387,153	25,900,068	244,943	3,249,438

The general movement of coin and bullion at this port during the month of June resulted in a deficiency of \$3,327,247 which has been made up from unreported sources. The amount of the deficiency in the reported supply for the first half of the current year is shown at \$35,964,479, the larger part of which came from Government sales. The following formula shows the details for the first two quarters, the month of June and since January 1 to June 30 :

GENERAL MOVEMENT OF COIN AND BULLION.

	1st quarter.	2d quarter.	June.	Since Jan. 1.
In banks at commencement.....	\$13,135,223	\$3,523,609	\$14,617,000	\$13,135,223
Receipts from California.....	6,109,861	6,399,555	3,568,778	13,009,416
Imports from foreign countries.....	409,077	1,145,913	497,477	1,554,989
Coin interest paid by U. States.....	10,883,803	17,793,026	1,337,933	23,631,363
Total reported supply.....	\$30,542,463	\$34,861,101	\$18,990,399	\$56,890,955
Export to foreign countries.....	\$5,503,959	\$17,653,956	\$3,343,529	\$34,219,994
Customs duties.....	33,170,628	\$7,185,886	8,040,114	60,356,514
Total withdrawn.....	\$39,737,586	\$44,838,882	\$11,383,643	\$34,576,498
Excess of reported supply.....	\$.....	\$.....	\$4,531,749	\$.....
Excess of withdrawals.....	\$1,196,123	10,477,791	.....	\$3,196,453
Specie in banks at close.....	3,523,609	7,703,996	7,703,996	7,703,996
Derived from unreported sources.....	\$17,717,733	\$13,346,747	\$3,237,347	\$35,964,479

The statement which follows shows the daily range of American gold coin as quoted at the Gold Room :

COURSE OF GOLD AT NEW YORK, JUNE, 1867.

Date.	Open'g	Lowest	High'et	Closing.	Date.	Open'g	Lowest	High'et	Closing
Saturday..... 1.....	136½	136¼	136½	136½	Friday..... 21.....	137½	137½	137½	137½
Sunday..... 2.....	.....	.....	.....	.....	Saturday..... 22.....	138½	137½	138½	137½
Monday..... 3.....	136½	136½	137½	137	Sunday..... 23.....	.....	.....	.....	.....
Tuesday..... 4.....	137	136½	137½	136½	Monday..... 24.....	138½	138½	138½	138½
Wednesday..... 5.....	136½	136½	136½	136½	Tuesday..... 25.....	138½	138½	138½	138½
Thursday..... 6.....	136½	136½	136½	136½	Wednesday..... 26.....	138½	138½	138½	138½
Friday..... 7.....	136½	136½	136½	136½	Thursday..... 27.....	138½	137½	138½	138
Saturday..... 8.....	136½	136½	137	136½	Friday..... 28.....	139	137½	138½	138
Sunday..... 9.....	.....	.....	.....	.....	Saturday..... 29.....	138½	137½	138½	138½
Monday..... 10.....	136½	136½	137½	137½	Sunday..... 30.....	.....	.....	.....	.....
Tuesday..... 11.....	137½	137½	137½	137½	June.. 1867.....	136½	136½	138½	138½
Wednesday..... 12.....	137½	137½	137½	137½	" 1866.....	140½	137½	137½	139½
Thursday..... 13.....	137½	137	137½	137½	" 1865.....	134	135½	147½	141
Friday..... 14.....	137	137	137½	137½	" 1861.....	194	123	250	147½
Saturday..... 15.....	137	137	137½	137½	" 1863.....	146½	140½	148½	147½
Sunday..... 16.....	.....	.....	.....	.....	" 1862.....	103½	103½	109½	109
Monday..... 17.....	137½	137½	137½	137½	" 1861.....	100	100	100	100
Tuesday..... 18.....	137½	137½	138	137½	Since Jan. 1, 1867.....	132½	132½	141½	138½
Wednesday..... 19.....	137½	137½	138½	138½					
Thursday..... 20.....	137½	137½	137½	137½					

The course of foreign exchange during the month has been very regular. Quotations have ruled at a slight per centage above the specie shipping point, until near the close of the month, when with an improved supply of bills, chiefly from shipments of bonds, rates fell to a point admitting of the export of bullion, but not of specie.

The following shows the course for the month :

COURSE OF FOREIGN EXCHANGE (60 DAYS)—JUNE, 1897.

Days.	London. cents for \$4 pence.	Paris. centimes for dollar.	Amsterdam. cents for florin.	Bremen. cents for rix daler.	Hamburg. cents for M. banco.	Berlin. cents for thaler.
1.....	110 @110%	515 @511%	41% @41%	79% @79%	86% @86%	72% @72%
2.....	110 @110%	515 @511%	41% @41%	79% @79%	86% @86%	72% @72%
3.....	110 @110%	515 @511%	41% @41%	79% @79%	86% @86%	72% @72%
4.....	110 @110%	515 @511%	41% @41%	79% @79%	86% @86%	72% @72%
5.....	110 @110%	515 @511%	41% @41%	79% @79%	86% @86%	72% @72%
6.....	110 @110%	515 @511%	41% @41%	79% @79%	86% @86%	72% @72%
7.....	110 @110%	515 @511%	41% @41%	79% @79%	86% @86%	72% @72%
8.....	109% @110%	518% @512%	41% @41%	79% @79%	86% @86%	72% @72%
9.....	110 @110%	515 @511%	41% @41%	79% @79%	86% @86%	72% @72%
10.....	110 @110%	515 @511%	41% @41%	79% @79%	86% @86%	72% @72%
11.....	110 @110%	515 @511%	41% @41%	79% @79%	86% @86%	72% @72%
12.....	109% @110%	518% @512%	41% @41%	79% @79%	86% @86%	72% @72%
13.....	110 @110%	518% @512%	41% @41%	79% @79%	86% @86%	72% @72%
14.....	110 @110%	518% @512%	41% @41%	79% @79%	86% @86%	72% @72%
15.....	109% @110%	515 @511%	40% @41%	78% @79%	86% @86%	72% @72%
16.....	109% @110%	515 @511%	40% @41%	78% @79%	86% @86%	72% @72%
17.....	109% @110%	515 @511%	40% @41%	78% @79%	86% @86%	72% @72%
18.....	109% @110%	515 @511%	40% @41%	78% @79%	86% @86%	72% @72%
19.....	109% @110%	515 @511%	40% @41%	78% @79%	86% @86%	72% @72%
20.....	109% @110%	517% @513%	40% @41%	78% @79%	86% @86%	72% @72%
21.....	110% @110%	517% @513%	40% @41%	78% @79%	86% @86%	72% @72%
22.....	109% @110%	517% @513%	40% @41%	78% @79%	86% @86%	72% @72%
23.....	109% @110%	517% @513%	40% @41%	78% @79%	86% @86%	72% @72%
24.....	108% @109%	517% @513%	40% @41%	78% @79%	86% @86%	72% @72%
25.....	109% @109%	517% @513%	40% @41%	78% @79%	86% @86%	72% @72%
26.....	109% @109%	517% @513%	40% @41%	78% @79%	86% @86%	72% @72%
27.....	109% @110%	517% @513%	40% @41%	78% @79%	86% @86%	72% @72%
28.....	109% @110%	517% @513%	40% @41%	78% @79%	86% @86%	72% @72%
29.....	109% @110%	517% @513%	40% @41%	78% @79%	86% @86%	72% @72%
30.....	109% @110%	517% @513%	40% @41%	78% @79%	86% @86%	72% @72%
June.....	109% @110%	518% @511%	40% @41%	78% @79%	86% @86%	72% @72%
May.....	109% @110%	520 @510	40% @41%	78% @80	86% @86%	71% @72%
Apr.....	108% @109%	522% @512%	40% @41%	78% @79%	85% @86%	71% @72%
Mar.....	108 @109%	525 @515	40% @41%	78 @79%	85% @86%	71% @72%
Feb.....	108% @109%	523% @515	40% @41%	78% @79%	86% @86%	71% @72%
Jan.....	108% @109%	520 @512%	41% @41%	78% @79%	86% @86%	72% @72%
Since Jan 1.....	108 @110%	525 @510	40% @41%	78 @80	85% @86%	71% @72%

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

Condition of Banks—Quarterly Statement—Certified Cheques and Comptroller Harbard—Bank Returns of New York, Philadelphia and Boston.

The banks of the great central cities appear to be abundantly supplied with available capital. A long period of caution and conservative management has made them strong. For the first time in a year or more the quarterly bank returns to Washington have been made up without any disturbance of the money market, and we have no doubt from the investigations we have been able to make both here and in other financial centres, that the reports when published a few weeks hence will prove that these institutions generally are more healthy and sound and therefore more useful to the country than in any previous period since

the National Currency Act was first passed by Congress. It would have been Utopian to have expected that sixteen or seventeen hundred banks, many of them entirely new, could in three or four years be brought into activity without the intrusion of a few unworthy institutions, whose weakness and instability would unfit them for union with the other members of the sisterhood of banks. But it was to be expected, and it is in fact realized, that the exposure of the rotten parts of the financial edifice should be speedy, and that the excision of the unsound banks should be effected without compromising the safety or disturbing the integrity of the vast national organization as a whole. Among the numerous appliances which have been brought into play for the purposes referred to, it is impossible to overestimate the influence of the press. Publicity of the condition of the banks must ever be regarded as one indispensable condition for annihilating or keeping in check those forces which lead to unsound and dangerous business. The visits of the Government examiners, and the reports given monthly and quarterly to the department at Washington, derive their chief value from this; that they expose the interior of the banks to publicity, and thus afford means of verifying their accounts and testing their soundness, in the interest and for the information of their stockholders, of their dealers, and of the public generally, whose fortunes and business efficiency are so intimately associated with every movement of these institutions. We need not urge the obvious fact that the rendering of their official quarterly reports ought not to impose on the banks the necessity of modifying their usual business. We regard it, therefore, as a good sign, and a proof of the soundness of the banks, that the perturbations and irregularities which have been complained of in the money market as attendant on previous quarterly reports have in the present case been avoided, while the reports themselves show unusually satisfactory results. Were our banks, like those of England eighteen months ago, unduly expanded, or were they now filled, as in 1864, with securities of doubtful value, we should not dare to conclude so hopefully as to the future. But in the presence of so many undoubted facts indicative of strength, while the bank vaults are filled with Government bonds and other securities of undoubted soundness and appreciating value, we have little hesitation in putting on record the opinion that, notwithstanding the failure of a few banks in New Orleans and elsewhere, the National Banks generally are in such a condition that in the absence of any unforeseen influences arising out of Congressional interference, a considerable period of exemption from the ordinary causes of monetary stringency may probably be enjoyed, which, if Providence should grant us an abundant harvest, may be productive of the happiest results on the trade, commerce, wealth and general prospects of the country.

There has been some discussion the past month in this city with regard to certified cheques, and the probable action of Comptroller Hulbard with regard to them. The publication by the daily press of his letter, however, shows that no power is claimed by that officer to dictate to the banks, to interfere with their long established principles of management, or to disturb any of those safeguards and economical expedients which are sanctioned by experience and useful in business. Yet, while he does not claim under the law any right to forbid the certification of cheques he does claim the right to correspond in a semi-official way

on the reports of the examiners, which are periodically made to him relative to every bank in the country. We hope, indeed, to hear more from these reports, and as the Comptroller has now got his office and his methods well organized, the public expect to see evidence that the examiners visit every one of the banks however remote at frequent intervals, and that wherever he finds anything which rightly or wrongly seems irregular, he avails himself of the undoubted right to ask for explanations. What has been complained of, and what the public generally are not satisfied with, is rather the secrecy with which most of the investigations of the Currency Bureau with the banks are enveloped. Here in New York, the heart and brain of the whole banking organism, we ought to know promptly from official publication many facts of which the Bureau is cognizant relative to broken and other banks all over the country, which now reach us, and through us the whole nation, in a very slow, round-about, and unsatisfactory manner. The information the Bank Department obtains is reported there by law not for the private information of the officers of that Bureau, but for the public, and the public ought to be put in possession of the information without delay.

The letter of the Comptroller on certified cheques referred to above was addressed to Mr. Haight, the President of the Bank of the Commonwealth, in this city, and has elicited a reply which exhibits the reasons why the banks of New York have adopted the practice of certifying the cheques of their dealers, and claims that in this city the practice is safe, necessary and superior to any plan that has ever been substituted or suggested instead of it. On the usefulness of the custom Mr. Haight says that "certifying checks in excess of actual balances at the moment the certification is made, is a practice that has grown to be a necessity in the transaction of business here. The practice is much older than the national banking system and than the New York State system, on which that was modeled. It is the outgrowth and result of the tendency of the business mind to overcome the hindrances that a rigid adherence to the original cast iron system of banking presented to the increasing growth and extent of business in this city. And although the large transactions of bankers and brokers occasions the practice to be spoken of as employed for them alone, such is not the fact; for there is no merchant of credit and responsibility, whose matured notes or cheques for such reasonable sums as he might give them, being presented and refused payment at *one o'clock*, because his deposits were not usually made till *two*, would not evoke a displeasure that would be speedily manifested in a closing of the account." To do away with the necessity for the certifying of cheques two expedients have been suggested; first, the establishment of a Stock Exchange Clearing House, and secondly, the use of cheques without the security and guarantee given by certification. The latter of these suggestions Mr. Haight discusses as follows:

I beg to ask (so long as cheques are, and of necessity must be, used in the transfer of balances), how safer than the present system it would be for banks to receive in deposit cheques on each other not certified, against which they become liable to pay their own customers' cheques, than to discriminate in certifying for them, and to require in turn, as is done, that their deposits shall consist of certified cheques on other banks? In the one case the bank trusts its own customer, of whose character, capital

and business capacity it may be presumed to be reasonably able to inform itself; in the other, it of necessity trusts scores of customers of other banks, of whom it can hardly be presumed to know much. Or in one case it may have certified its customers' cheques to the extent of \$10,000,000, and have received from them on deposit, certified cheques to the amount of \$11,000,000 with perfect safety on both sides, and in the other it may not have certified a dollar, and having on deposit \$11,000,000 of cheques on other banks, not certified, rendered itself liable to pay that amount to any number of brokers holding its customers' cheques, who may require the banks to pay them rather than hold their cheques till after the day's clearings. Such requirement on the part of broker, banker or merchant would hardly be deemed "*im-pudent*"—a refusal of the bank to pay might be deemed so. But would paying under such circumstances be absolutely safe? Would it not have been safer to have certified at first and secured certified cheques from them?

But you say that we would probably reject without hesitation a proposition to certify in this way for our depositors without discrimination. To which I reply not only *probably*, but most *certainly*. It is just this ability to discriminate, this exercise of judgment discretion, tact and experience that is presumed to give value to the services of a bank's officers. And if in the exercise of these qualities a discriminating policy is adopted that results in a mutual advantage to bank and depositor alike, who can have just cause for complaint? For it by no means follows that the banker, broker, or merchant is alone benefitted by these transactions. The resulting balance issues most substantially to the benefit of the bank, enabling it to loan money far in excess of its capital for the substantial profit of its stockholders. As, then, the depositor trusts the bank, why should not the bank trust its depositors? In these transactions the depositor is trusted for but for an hour or two—the bank is trusted for days. It ought, therefore to be assumed that *both* act with discrimination, and that in the exercise of this discrimination the safety of both may be reasonably assured. Brokers alone do not claim this indulgence—it is extended alike to bankers and merchants, in different degrees, with such reasonable discrimination as bank officers are presumed to exercise—and, in this city at least, it is not an indulgence that is by any means extraordinary. You speak of it as an "abuse of practice." Like all other practices, not wrong in themselves, it may be abused; but I am not by any means, prepared to admit that it is generally abused, or that its abuses have not been rare and exceptional.

As to the plan of a Stock Exchange Clearing House, the letter before us offers no observations. The Comptroller, we believe, is of opinion that the certification of cheques might be dispensed with, by the establishment of a clearing institution to fulfil to the dealers in stocks similar functions to those for which the gold dealers depend on the new Gold Exchange Bank. We believe that the general opinion in Wall street is not favorable to the scheme, the merits of which have never, in any country, been submitted to the test of experience.

Below we give the returns of the Banks of the three cities since Jan. 1 :

NEW YORK CITY BANK RETURNS.

Date.	Loans.	Specie.	Circulation.	Deposits.	Legal Tend's.	Ag. clear'gs
January 5.	\$357,833,460	12,794,899	22,762,779	202,532,564	65,026,121	425,987,787
January 12.	266,983,488	14,612,477	22,625,108	202,517,008	63,946,370	605,123,006
January 19.	266,983,222	15,365,207	22,854,928	201,500,115	63,225,386	520,040,028
January 26.	261,674,601	16,014,097	22,957,198	197,953,076	63,426,550	568,822,814
February 2.	251,264,355	16,322,984	22,365,347	200,511,596	63,944,641	512,407,258
February 9.	250,968,228	16,157,267	22,777,100	198,941,825	67,628,993	508,355,523
February 16.	263,121,228	14,792,626	22,954,309	196,072,222	64,642,940	455,583,523
February 23.	267,622,994	15,512,456	22,606,141	198,420,347	68,165,593	442,574,086
March 1.	261,156,426	11,579,881	22,294,423	196,018,914	61,014,105	466,522,119
March 8.	262,141,453	10,863,189	22,400,811	200,228,537	64,622,439	454,173,266
March 15.	262,072,973	9,968,722	22,410,663	197,953,504	62,812,039	466,522,119
March 22.	269,400,316	9,142,913	22,519,401	194,275,615	60,904,958	472,023,216
March 29.	255,282,264	8,594,619	22,609,125	198,420,350	62,459,811	459,860,802
April 5.	254,470,027	8,128,813	22,774,573	192,861,299	59,021,775	521,826,184
April 12.	250,102,178	8,265,229	22,702,047	194,861,226	60,202,515	525,923,422
April 19.	247,561,731	7,622,525	22,648,571	184,000,256	64,096,916	447,814,275
April 26.	247,737,881	7,404,804	22,601,265	187,674,341	67,920,251	446,424,422
May 3.	230,672,553	9,902,177	22,671,747	195,721,072	70,527,407	509,890,118

Date.	Loans.	Specie.	Circulation.	Deposits.	Legal Tend's.	Ag. clear'g
May 11.....	253,683,329	14,989,590	83,595,569	300,343,833	37,906,589	594,319,769
May 18.....	257,961,874	15,687,259	83,681,801	301,436,654	63,888,601	598,678,798
May 25.....	256,091,905	14,083,687	83,097,253	193,679,845	60,562,440	451,732,923
June 1.....	253,791,514	14,617,070	83,747,089	190,896,128	68,459,837	443,675,885
June 8.....	250,477,298	15,699,088	83,719,083	184,780,385	55,923,177	461,734,316
June 15.....	246,228,455	12,656,839	83,707,199	180,317,738	57,934,494	460,983,009
June 22.....	243,640,477	9,899,585	83,683,171	179,477,170	62,816,192	442,440,804
June 29.....	243,547,954	7,768,996	83,543,580	186,813,367	70,174,755	493,944,356

PHILADELPHIA BANK RETURNS.

Date.	Legal Tenders.	Loans.	Specie.	Circulation.	Deposits.
January 5.....	\$20,209,064	52,812,317	903,663	10,288,820	41,368,327
January 12.....	20,606,355	52,538,491	903,880	10,330,577	41,622,421
January 19.....	19,445,099	53,455,807	877,548	10,851,595	30,045,645
January 26.....	19,263,374	52,163,473	890,583	10,384,683	39,001,779
February 2.....	19,969,128	55,351,180	871,664	10,430,808	39,592,713
February 9.....	19,659,259	52,834,829	873,614	10,449,993	39,811,595
February 16.....	18,892,747	52,673,180	867,110	10,522,973	40,050,717
February 23.....	17,837,599	52,894,731	841,223	10,556,434	38,646,013
March 1.....	17,150,657	51,979,173	816,843	10,513,600	39,267,366
March 8.....	17,321,705	51,851,463	812,535	10,572,063	37,814,673
March 15.....	16,955,603	50,503,394	833,024	10,580,911	37,698,001
March 22.....	16,971,740	50,872,490	807,408	10,611,937	34,651,545
March 29.....	16,564,913	50,880,906	602,146	10,631,633	34,150,385
April 6.....	15,892,745	50,996,351	664,719	10,631,615	33,794,295
April 13.....		51,833,775	546,623	10,645,367	34,537,623
April 20.....		51,611,441	455,538	10,647,224	35,380,580
April 27.....		51,890,939	382,817	10,638,021	36,234,370
May 4.....		52,054,267	386,053	10,639,693	37,271,064
May 11.....		53,474,833	408,768	10,627,933	38,173,169
May 18.....		53,336,820	402,792	10,630,851	38,330,333
May 25.....		53,336,170	369,182	10,635,590	37,773,733
June 1.....	16,881,109	52,747,808	334,293	10,637,483	37,332,144
June 8.....	16,380,730	53,153,194	346,615	10,642,630	37,363,614
June 15.....	16,300,010	53,192,049	338,361	10,646,398	37,174,369
June 22.....	15,964,494	52,968,441	373,309	10,642,234	37,332,979
June 29.....	16,103,61	52,588,963	365,187	10,641,811	36,616,847

BOSTON BANK RETURNS.

(Capital Jan. 1, 1866, \$41,900,000.)

	Loans.	Specie.	Legal Tenders.	Deposits.	Circulation.	
					National.	State.
January 7.....	\$91,649,542	1,183,421	17,033,387	46,824,613	34,580,367	513,694
January 14.....	93,481,773	1,394,300	16,289,36	40,246,316	34,997,446	511,746
January 21.....	92,536,692	1,078,160	16,595,499	33,679,604	34,376,163	501,911
January 28.....	97,501,322	1,058,329	16,816,431	39,319,341	31,716,597	502,266
February 4.....	97,642,461	956,569	16,394,604	32,703,038	34,691,076	506,014
February 11.....	97,294,163	873,896	1,103,479	39,474,859	34,636,663	503,608
February 18.....	96,940,413	929,490	15,898,888	33,900,500	34,785,490	503,608
February 25.....	96,234,900	779,403	15,741,046	37,893,963	34,953,605	503,223
March 4.....	95,050,727	958,587	15,908,103	33,816,573	34,675,767	501,430
March 11.....	95,078,973	896,447	15,719,479	33,712,053	34,646,631	160,505
March 18.....	92,156,406	568,694	16,970,979	36,751,733	34,800,535	299,123
March 25.....	92,661,000	516,184	16,597,905	38,721,723	34,738,733	292,011
April 1.....	91,722,317	435,113	17,112,423	37,056,888	34,843,876	296,925
April 8.....	91,679,549	453,751	16,860,418	37,368,776	34,851,533	296,011
April 15.....	91,712,414	376,848	16,815,353	37,218,525	34,533,819	287,205
April 22.....	92,472,615	343,713	16,549,598	38,307,548	34,653,300	286,701
April 29.....	92,353,921	329,854	16,936,564	37,337,093	34,611,437	284,933
May 6.....	91,671,149	509,878	16,571,786	36,721,769	34,784,333	283,896
May 13.....	91,493,114	517,597	16,562,421	33,504,761	34,600,903	283,514
May 20.....		507,806	16,499,319	37,874,824	34,538,466	283,491
May 27.....		441,073	16,883,361	37,133,901	34,805,800	280,961
June 3.....		671,525	17,173,901	37,046,894	34,725,794	279,375
June 10.....		498,767	16,767,864	36,033,716	34,804,133	286,768
June 17.....		511,095	15,719,785	34,089,933	34,771,778	277,043
June 24.....		470,644	15,753,896	36,521,149	34,763,947	267,294

COMMERCE OF SAN FRANCISCO.

The returns for the quarter ending March 31, are summed up in the annexed statements:

The tonnage arrivals (whalers not included) amounted to—

From—	1864. Tons.	1865. Tons.	1866. Tons.	1867. Tons.
Domestic Atlantic ports.....	19,861	23,004	25,881	34,461
Domestic Pacific ports.....	64,279	68,983	66,657	77,840
Foreign ports.....	66,101	73,183	84,829	69,984

Of the arrivals from foreign ports, a large portion is composed of steam tonnage employed by regular lines plying up and down the Pacific coast, and is as follows:

	1864. Tons.	1865. Tons.	1866. Tons.	1867. Tons.
From Panama.....	25,284	25,658	26,418	28,415
From San Juan del Sur.....	2,443	4,744	4,893	6,973
From Northern Mexico.....	10,081	2,193	5,985	4,103
From British Columbia.....		8,991	2,269	2,040
Totals.....	37,708	41,575	39,055	35,638

The receipts of merchandise via the Isthmus of Panama were as follows:

	1865.	1866.	1867.
Tons.....	6,788	7,080	8,126

The amount of freights paid on merchandise imports has been as follows:

From—	1865.	1866.	1867.
Domestic Atlantic ports.....	\$1,082,098	\$906,014	\$802,445
Panama, per steamers.....	499,451	415,876	511,480
Principal foreign ports.....	406,834	308,972	311,553
Other foreign ports.....	47,274	158,161	63,392
Total freights on cargoes.....	\$2,035,653	\$1,718,523	\$1,683,770

The merchandise exports show an increase over those of last year. The figures are as follows:

To	1865.	1866.	1867.
New York, &c.....	\$983,611	\$916,954	\$1,815,117
Great Britain.....	23,998	261,325	1,673,760
Mexico.....	576,228	435,584	682,737
South America.....	104,753	59,509	58,571
Hawaiian Islands.....	129,341	267,591	193,659
China.....	217,765	392,488	812,933
Australia and New Zealand.....	11,000	1,416,483	18,159
British Columbia.....	354,118	890,950	216,224
Other countries.....	140,618	71,779	179,149
Totals.....	\$2,001,443	\$4,143,128	\$4,784,842

The amount of shipments to domestic Atlantic ports, as indicated in the above table, represents their value both by sailing vessels and steamers, via Panama, and New York. The amount of shipments forwarded by the steamers of the Pacific Mail Steamship Company, for transit across the Isthmus, were:

	1865.	1866.	1867.
Merchandise by Panama transit.....	\$294,840	\$269,119	\$615,837

The amount of treasure exported during the first quarter of the past three years has been as follows:

1865.....	\$11,523,334	1866.....	\$9,525,515	1867.....	\$9,635,305
-----------	--------------	-----------	-------------	-----------	-------------

The combined exports of treasure and merchandise are represented by the following:

1865..... \$14,122,175 | 1866..... \$13,668,698 | 1867..... \$14,510,14

Exclusive of transfers by Government, the total exports this year are \$941,599 in excess of a like period in 1866, and \$480,971 more than they were in the first quarter of 1865.

The receipts of treasure from the interior and coastwise, through regular public channels, during the quarter just ended, including coin and bullion, have been as follows:

From California	\$5,798,970
Coastwise.....	627,995
Nevada.....	41,485
British Columbia, Mexico, etc.....	1,395
Total	\$11,868,797

The comparative aggregates for three years are as follows:

1865..... \$12,912,973 | 1866..... \$11,008,692 | 1867..... \$11,945,732

The product of the mines on this coast received through the express companies for the above named period was:

1865..... \$12,160,980 | 1866..... \$9,326,894 | 1867..... \$9,379,13

The figures show a slight increase this year as against last, but in view of the extraordinary severity of the past winter, the comparison is a very favorable one for the present season.

CONTENTS FOR JULY.

NO.	PAGE.	NO.	PAGE
1. Census of Rhode Island, 1865.....	9	9. The Prevention of Railroad Accidents.....	66
2. Railroad Earnings for May.....	14	10. Debt and Finances of San Francisco.....	68
3. On the Collection of Revenue.....	15	11. Railroads of the World.....	69
4. Debt and Finances of Chicago.....	31	12. Ireland for 1866.....	70
5. Commercial Law, No. 32—Fire Insurance.....	34	13. Lloyd's List of Wrecks and Casualties.....	72
6. Toledo, Wabash and Western Railroad.....	41	14. Commercial Chronicle and Review.....	74
7. Railway Extension and its Results.....	44	15. Journal of Banking, Currency, and Finance.....	82
8. Central Railroad of New Jersey.....	63	16. Commerce of San Francisco.....	87

The following advertisements appear in our advertising pages this month:

MERCANTILE.		INSURANCE.	
Lillie's Fire & Burglar-Proof Safes—138 B'way		Eugene Kelly & Co.—36 Wall St.	
Fowler & Wells—386 Broadway.		DeWitt, Kittle & Co.—33 Wall St.	
L. Prang & Co.—Boston and New York—Holiday Publications, etc.		Simon De Vliesser—33 Exchange Place.	
Howard & Co.—519 Broadway—Diamonds, Watches, Holiday Gifts, etc.		Duncan, Sherman & Co.—Cor. Pine & Nassau.	
Mercantile Library—Clinton Hall, Astor Place and Eighth St.		L. F. Morton & Co.—30 Broad Street.	
Ferdinand Korn—191 Fulton St.—Eau de Cologne.		Robinson & Ogden—4 Broad St.	
Lewis Audendried & Co.—110 Broadway—Anthracite and Bituminous Coal.		Howe & Macy—50 Wall St.	
Kellogg's U. S. Mercantile Register for 1867-8.		Gilmore, Dunlap & Co.—Cincinnati.	
A. B. Sands & Co.—139-141 William St.—Drugs		Lewis Johnson & Co., Washington.	
J. W. Bradley—97 Chambers St.—Hoop Skirts.		Ninth National Bank—383 Broadway.	
Chickering & Sons—422 Broadway—Pianos.			
BANKERS & BROKERS.			
Tenth National Bank—326 Broadway.		New York Mutual Insurance Co.—61 William St.	
Barstow, Eddy & Co.—35 Broad St.		Fidelity Insurance Co.—17 Broadway.	
Lockwood & Co.—94 Broadway.		Marine—Atlantic Mutual Ins. Co.—51 Wall St.	
Vermilye & Co.—44 Wall St.		Mercantile Mut. Ins. Co.—35 Wall St.	
		Orient Mutual Ins. Co.	
		Sun Mutual Ins. Co.—49 Wall St.	
		Great Western Insurance Co.	
		Fire—Hope Fire Ins. Co.—22 Broadway.	
		Germania Fire Ins. Co.—175 Broadway.	
		Ætna Insurance Co.—Hartford.	
		U. S. Life Insurance Co.—40 Wall St.	

THE MERCHANTS' MAGAZINE

AND COMMERCIAL REVIEW.

AUGUST, 1867.

RAILWAY EXTENSION AND ITS RESULTS.

BY R. DUDLEY BAXTER, M.A.*

(Continued from page 63, Vol. 57.)

VII.—COST AND RESULTS OF FRENCH RAILWAYS.

The French system of railway organization is worthy of attentive study. It is in many points novel to an Englishman; it is often characterized by remarkable talent; and some of its regulations are very instructive and worthy of imitation.

In extent the French lines are far inferior to the English, whether judged by the area or population of the two countries.

COMPARISON BY AREA.

Country.	Area in Square Miles.	Railway Mileage. 1865.	Square Miles per Mile of Railway.
United Kingdom.....	120,927	13,289	9
France.....	211,853	8,124	26

* Read before the Statistical Society of London November, 1866

COMPARISON BY POPULATION.

Country.	Population, 1861.	Railway Mileage. 1865.	Population per Mile of Railway.
United Kingdom...	29,321,000	13,289	2,206
France.....	37,382,000	8,184	4,595

Hence, measured by area, France has only one-third of the railway accommodation, and measured by population only one-half of the railway accommodation of the United Kingdom.

The capital authorized and expended to the 31st December, 1865, was as follows:

CAPITAL AUTHORIZED.

<i>Ancien Réseau</i> , or old lines	£151,000,000
<i>Nouveau</i> " or extension lines.....	209,000,000—£360,000,000
Including 64,000,000 subventions.	

CAPITAL EXPENDED, 1866.

Debentures	£178,700,000
Shares	54,800,000
Subventions.....	27,600,000—£261,000,000

So that the French companies borrow more than three times the amount of their share capital; reversing the English rule, of borrowing only one-third of the share capital. But if we consider preference capital as a second mortgage, the English practice is to borrow an amount equal to the ordinary share capital. This, however, is still a long way from the French regulations.

The capital not paid up is nearly £100,000,000. Of this nearly one-half will be required in the next three years for lines approaching completion.

The cost per mile of French railways is as follows:

<i>Ancien Réseau</i>	\$30,650
<i>Nouveau</i> "	27,360

As the *nouveau réseau* is almost entirely composed of single lines, this does not show very great cheapness of construction. We are making our country lines much cheaper, particularly in Ireland and Scotland.

The effect of railway competition with canals was the same as in England. The canal rates were reduced to one-third of their former amount, and the canal traffic has increased instead of diminishing. The average railway fares and rates are stated by M. Flachet, in his work on railways, to be 6 to 7 centimes for each passenger, and son per kilometre, being 1d. to 1½d. per mile; as compared with 1½d. per mile, the average on English railways.

The increase of traffic since 1850 is stated in the official returns as follows:

INCREASE OF TRAFFIC.

Year.	Total Receipts.	Average Annual Increase.	Average Annual Increase for Fifteen Years.
1850.....	£ 3,324,400		
1855.....	10,358,000	£1,307,000	
1860.....	16,443,000	1,217,000	£1,238,400
1865.....	22,400,000	1,192,000	

Thus the increase has been more equable than in England, but smaller in amount, showing an average of £1,238,400, against £1,423,000 in England. But I see it stated in the railway papers that the first nine months of 1866 show much more than the usual increase.

M. Flachet gives a calculation of the saving to the nation by railway conveyance, which he makes a minimum of £40,000,000 a year. But it is based on the supposition that all the new trade would have been carried by road, which is obviously untenable. Probably £25,000,000 to £30,000,000 is a safer estimate. A writer in the "Dictionnaire du Commerce" goes into elaborate calculations of the money-saving arising out of the greater rapidity of railways, and values it at £8,000,000, on the basis that the time of a French citizen is worth 5d. an hour. I give the passage entire:

"In France, the number of kilometres travelled by passengers in 1856 was 2,200,000,000. In traveling this distance they would have spent 290,000,000 hours, while they have only been 50,000,000 hours on the railway. The saving in time of travelling by railway has therefore been 240,000,000 hours, which, at the moderate price of 5d. per hour, represent an economy of 120,000,000 frs. Besides this, the time lost in stoppages at small inns (auberges) used to exceed that spent in travelling, and hence on this head alone we may calculate on a saving of more than 100,000,000 frs. But even if we should reduce this valuation to 80,000,000, or still lower to 60,000,000 frs., there cannot be any doubt that the saving to the traveller is the matter of time alone exceeds 200,000,000 frs. (£8,000,900)."—Vol. i., p. 638.

Passing from individuals to commerce, the effect of railways has been very marked, and is warmly acknowledged by the principal French writers. The following table shows the progress of French trade:

INCREASE OF EXPORTS AND IMPORTS.

Year.	Total Exports and Imports.	Increase per Cent.	Increase per Cent per Annum.
1840	£ 82,520,000	—	—
1845	97,080,000	15.	3.
1850	102,204,000	5.	1.
1855	178,076,000	50.	10.
1860	232,192,000	24.	6.3
1865	293,144,000	26.25	5.25

The revolution of 1848 accounts for the small increase between 1845 and 1850, but it is plain that the great increase in French commerce was between 1850 and 1860, contemporaneously with the great development of railways. When travelling in France I have always heard railways assigned as the cause of their present commercial prosperity.

The proportion which the exports and imports bore to the means of communication is shown in the following table:

PROPORTION OF EXPORTS AND IMPORTS TO RAILWAYS AND NAVIGATION.

Year.	Navigations. (7,700 miles), and Railways.	Exports and Imports.	Exports and Imports per Mile Open.
1840	8,264	£ 82,520,000	£ 9,985
1845	8,547	97,080,000	11,363
1850	9,507	102,204,000	10,750
1855	11,015	178,076,000	15,712
1860	13,286	232,192,000	17,476
1865	15,330	293,144,000	18,518

Here there is a steady rise in the amount per mile, checked only by the revolution of 1848. But the principle that there is a distinct correspondence between means of communication and the exports and imports is already shown.

The effect of railways on the condition of the working classes has also been very beneficial. The extreme lowness of fares enables them to travel cheaply, and the opportunity is largely used. The number of third class passengers in France is 75 per cent of the total passengers, against only 58 per cent in England (M. Flachet, p. 60). The result of these facilities of motion has been an equalization of wages throughout the country, to the great benefit of the rural populations. M. Flachet says :

"Railways found in France great inequality in the wages of laborers ; but they are constantly remedying it. Wherever they were constructed in a district of low wages, employment was eagerly sought. The working classes rapidly learnt to deserve high wages by the greater quantity of work done. Agriculture had been unable to draw out the capabilities of its workmen, and was for the moment paralyzed by want of hands ; but industry developed fresh resources. The total amount of work done was considerably increased all over the country. The difficulties of agriculture were removed by obtaining in return for higher wages a larger amount of work than before, and also because machines began to be used in cultivation. Everywhere it was evident that increased energy accompanied increased remuneration. This is the point in which railways have most powerfully increased the wealth of France. The moral result of this improvement in the means of existence of the working class has been to diminish the distance which separates the man who works only for himself from the man who labors for a master. In the education of the workman's children, in his clothing, in his domestic life, and even in his amusements, there is now an improvement which raises him nearer to his master."—pp. 78 and 79.

I am sure we shall all rejoice at this evidence of the benefits conferred by railways upon the working classes of that great neighboring nation. I wish there was time to give you additional extracts, showing the immense services of railways to the industry of France, showing that France was kept back by the difficulty of communication, by the immense distances to be traversed and the impossibility of conveying cheaply and rapidly the raw materials of manufactures. Railways have supplied this want, and have given a new impetus to production and new outlets for the produce.

Turning to the shareholders, there are some curious facts which surprised me not a little. The popular notion is, that in France railway traffic bears a much higher proportion to capital expended than in England. The phrase "They manage these things better in France" is forever on the lips of the British shareholder when he talks of his own paltry $4\frac{1}{2}$ per cent dividend, or of the $8\frac{1}{2}$ per cent gross receipts. The world in general believe that a 10 or 12 per cent French line, like the Orleans of France, really has a traffic of at least that amount. But this is an entire mistake. The gross traffic receipts of France are now 9.6 per cent on the share and debenture capital or 1 per cent more than in England. And the net receipts, after deduction of 45 per cent working expenses, are now 5.28 per cent on the total share and debenture capital, being .82 or about four-fifths per cent higher than in England. Yet the French companies pay an average dividend of 10 per cent, while the English pay only the

natural dividend of 4½. Here are the figures, for the benefit of the sceptical:

AVERAGE RECEIPTS AND DIVIDENDS PER CENT.

Name of Company.	1859.	1861.	1865.
Gross receipts	10.5	11.0	9.6
Net profits	5.7	6.2	5.28
<i>Dividends of Great Companies :</i>			
Nord	15.	16.5	17.87
Orleans	18.	20.	11.3
Midi	4.	19.	8½
Ouest	7.5	8.5	7.5
Est	8.18	8.	6.8
Mediterranee	10.6	15.	12.
Average	10.54	18.	10.58

Compare these figures with those for the English lines given above. You will see the remarkable correspondence between the gross and net receipts and the very remarkable dissimilarity in the dividends. How is this accounted for?

Look at the table of capital expended. Disregarding the £27,500,000 subventions, as corresponding to the *dixième* tax paid by the companies, there is £233,000,000 share and debenture capital, out of which a portion of the debentures are charged to capital under the conventions for the extension lines. Being for new railways, they have not yet been transferred to the revenue account. Hence the interest-bearing capital reduced and the interest itself increased.

The large amount of debentures now comes into play, on which there is paid from 5 to 5½ per cent, leaving an overplus to accumulate for the shares, so raising the interest on shares to nearly 7 per cent.

But this is not enough. In 1863 the State bound itself to contribute to certain lines annual subventions, which in 1865 came to £551,000, and the State also paid during the same year in respect of their guarantees of the debentures in the *nouveau réseau* £1,320,000, making a total subvention in 1865 of £1,871,000, an amount sufficient to pay more than 3 per cent on the share capital of £54,800,000. The guarantee of £1,220,000 on the *nouveau réseau*, however, is not an absolute subvention, as it will be repayable gradually by the companies when their income exceeds a fixed amount. It is therefore a loan by the State, repayable on the occurrence of a contingency and at an uncertain date.

Thus the original interest of 5.28 per cent on the share and debenture capital becomes 10 per cent to the shareholder. It is a wonderfully clever arrangement and would be exceedingly palatable to Great Eastern or even Great Northern shareholders.

But consider the difference which this shows in the ideas of the two countries. In England it would never be borne for an instant that six great companies, say the London and North Western, Great Western, Midland and others, should receive 10 per cent dividend and yet obtain from the State annual subventions and guarantees amounting to £1,800,000. No ministry dare propose such a job. The reform agitation would be nothing to the clamor with which it would be greeted; and yet in France it is the most natural thing possible. Nobody says a word against

it. Nay, the feeling of the French companies and the popular opinion is that these poor 10 per cent shareholders have been badly used and that their legitimate 12 or 15 per cent from the trunk lines ought not to have been lessened.

One characteristic of the French system is the absence of competition, and this is opposed to all our ideas of freedom of communication. The Northern Company monopolizes the whole traffic between Calais and Paris. The Mediterranean Company monopolizes the whole traffic between Paris and Marseilles, a traffic of extraordinary importance and value. An attempt made two years ago by another company to obtain an extension to Marseilles and to establish an alternative route was rejected by a Government commission after a very long inquiry. The consequence of this system is a great concentration of traffic in a small number of trains, to the profit of the companies and to the inconvenience of the traveller. There are in England, between places like Liverpool and London, about three times as many trains as there are in France between Marseilles and Paris. And besides this, goods are sent less rapidly in France and delivered with less punctuality.

But there is a great deal to be said in defence of the French system. It avoids the duplicate lines necessary for competition, which France could not well afford. It keeps the companies prosperous and able to aid the Government in railway extension. It is not an irresponsible monopoly, able to charge high prices to its customers, but a strictly regulated monopoly, with its tariff fixed by Government at the lowest prices that will be remunerative. It is like the system of our own Metropolitan Gas and Water Companies, which enjoy a monopoly within defined districts on terms settled by the law and revised from time to time in the interest of the public. The French Government appoints commissioners of inquiry to examine into any defect or to consider improvements, and they report to the minister of public works, who has the power of making regulations which are binding on the companies. The last commission is a good instance. In February, 1884, the minister of public works issued to the companies a circular suggesting several points which required improvement and the commission was appointed to consider their answers. The points discussed were:

- 1.—The adoption of a means of communication between the guard and engine-driver. This was made obligatory on the companies.

- 2.—A means of communication between passengers and the guard. This was accepted by the companies.

- 3.—The consumption by locomotives of their own smoke. This was ordered to be carried out within two years.

- 4.—The addition of second and third class carriages to express trains. The recommendation of the commission was accepted by the companies.

- 5.—Separate carriages for unprotected females.

- 6.—The commission demanded that on the great lines the speed of goods trains should be increased from 60 miles to 120 miles, without any increase of tariff. This very important question was referred to a sub-committee for further examination and for hearing objections.

From these details it is evident that the interests of the public are well looked after.

I should add that there is a continuous audit of the accounts of the

companies by Government accountants, who attend from week to week at the companies' offices for that purpose.

I will at present mention only one other point in French railway law—that the Government has the power of purchasing any line of railway after fifteen years from its first concession. The price is to be fixed by taking the amount of the net profits of the seven preceding years, deducting the two lowest years and striking the average of the remaining five years. The Government is then to pay to the company for the remainder of the concession an annual rent-charge or annuity equal to the average so determined, but not less than the profits of the last of the seven years. This mode of purchase appears preferable to the English law, since it does not require the creation of any new rentes or consols; and I commend it to the notice of Mr. Galt.

I have mentioned these prominent features of the French law, in the hope that they may be useful in suggesting improvements in the English system.

Why should we not vest in the President of the Board of Trade a power of making and enforcing regulations for the public safety and convenience? Why should we not introduce more frequent railway commissions to consider important questions and recommend to the President of the Board of Trade or to Parliament? Why should we not have a modified system of audit and a registration of shares and debentures?

VIII.—RAILWAYS IN BELGIUM AND HOLLAND.

Belgium is one of the most striking instances of the benefit of railways. In 1830 she separated from Holland, a country which possessed a much larger commerce and superior means of communication with other nations by sea and by canals. Five years later the total exports and imports of Belgium were only £10,800,000, while those of Holland were double that amount. But in 1833 the Belgian Government resolved to adopt the railway system, and employed George Stephenson to plan railways between all the large towns. The law authorizing their construction at the expense of the State passed in 1834, and no time was lost in carrying it out. Trade at once received a new impetus, and its progress since that time has been more rapid than in any other country in Europe. The following table shows the activity with which the lines were constructed. We must remember that Belgium contains only one-tenth of the area of the United Kingdom, and that to make a fair comparison with our own progress we must multiply the table by ten.

MILES CONSTRUCTED.

Year.	Miles Open.	Increase per annum Miles.
1839	185	
1845	385	25
1853	720	45
1860	1,037	45
1864	1,350	75

Hence, the progress for a state of the size of the United Kingdom would have been—

	Miles a Year.
1839 to 1845.....	250
1845 to 1853.....	480
1853 to 1860.....	450
1860 to 1864.....	750

a rate of increase which is as great or greater than our own.

The results on commerce are shown in the following table :

INCREASE OF EXPORTS AND IMPORTS.

Year.	Exports and Imports.	Increase per Cent.	Increase per Cent per Annum.
1835.....	£10,760,000		
1839.....	15,680,000	45.73	11.43
1845.....	26,920,000	71.4	11.9
1853.....	47,760,000	77.41	9.67
1860.....	72,120,000	51.	7.3
1864.....	97,280,000	35.88	"

I need scarcely point out the extraordinary character of this increase, which is enormous in the first ten years, and far beyond either England or France, and is not inferior to us in the later period. In the thirty years from 1835 to 1864 Belgium increased her exports and imports nearly tenfold, while England increased hers only fivefold. If we had increased our commerce in the same ratio, the English exports and imports would now be a thousand million pounds sterling.

The proportion between exports and imports and means of communication is shown in the following table, which differs from those of England and France in the rapid increase per mile :

PROPORTION OF EXPORTS AND IMPORTS TO RAILWAYS AND NAVIGATIONS.

Year.	Canals (910 Miles) and Railways Open.	Exports and Imports.	Exports and Imports per Mile Open.
1839.....	1,055	£15,680,000	£14,862
1845.....	1,205	26,920,000	22,340
1853.....	1,590	47,760,000	30,027
1860.....	1,907	72,120,000	37,818
1864.....	2,220	97,280,000	42,919

This enormous increase of Belgian commerce must be ascribed to her wise system of railway development, and it is not difficult to see how it arises. Before railways, Belgium was shut out from the continent of Europe by the expensive rates of land carriage and her want of water communication. She had no colonies and but little shipping. Railways gave her direct and rapid access to Germany, Austria and France, and made Ostend and Antwerp great continental ports. One of her chief manufactures is that of wool, of which she imports 21,000 tons, valued at £2,250,000, from Saxony, Prussia, Silesia, Poland, Bohemia, Hungary, Moravia and the southern Provinces of Russia ; and returns a large por-

tion in a manufactured state. She is rapidly becoming the principal workshop of the continent, and every development of railways in Europe must increase her means of access and add to her trade.

Now look at Holland, which in 1835 was so much her superior. Holland was possessed of immense advantages in the perfection of her canals, which are the finest and most numerous in the world; in the large tonnage of her shipping; in her access by the Rhine to the heart of Germany; and in the command of the German trade, which was brought to her ships at Amsterdam and Rotterdam. The Dutch relied on these advantages and neglected railways. The consequence was that by 1850 they found themselves rapidly losing the German trade, which was being diverted to Ostend and Antwerp. The Dutch Rhenish railway was constructed to remedy this loss, and was partly opened in 1853, but not fully till 1856. It succeeded in regaining part of the former connection. But now observe the result. In 1839 the Dutch exports and imports were £28,500,000, nearly double those of Belgium. In 1862 they were £59,000,000, when those of Belgium were £78,000,000. Thus while Holland had doubled her commerce, Belgium had increased fivefold and had completely passed her in the race.

Before leaving Belgium I ought to mention the cheapness of fares on her railways, which have always been much below those on English lines; a further reduction has lately been made, and I see by a French paper that the results has been to increase the passenger receipts on the State lines for the month of April from 76,936 frs. in 1865, to 198,345 frs. in 1866; of which 168,725 frs. was from third and fourth class passengers; a fact which is in favor of the plan of Mr. Galt. But it must be remembered that Belgium is the most densely populated country in the world, having 432 inhabitants to the square mile, while the United Kingdom has only 253, and England and Wales 347. A system which will pay admirably between large cities at short distances from each other, and on lines which cost little to construct, might break down completely on lines of expensive construction in more thinly inhabited districts. Mr. Galt takes his instances from railways in dense populations, and applies the rules thus obtained to railways which are under totally different conditions, and I fear that this vitiates in a great degree the soundness of his conclusions.

IX.—RAILWAYS IN THE UNITED STATES.

In any paper on foreign railways it is impossible to omit the United States, a country where they have attained such gigantic proportions. The increase of United States lines is as follows:

Year.	MILES CONSTRUCTED.	Total Inc. per an- mileage. num. Miles
1830.....	41	216
1840.....	2,197	455
1845.....	4,522	590
1850.....	7,475	1,984
1855.....	17,898	2,374
1860.....	28,771	1,373
1864.....	33,860	

The mileage here shown is something enormous: four times that of France, two and a half times that of England, and nearly as large as the total mileage of the United Kingdom and Europe, which is about 42,000 miles.

In so young a country inland traffic gives these lines the greater part of their employment, and there are no masses of expensive manufactured goods as in England or Belgium to swell the total value of foreign trade. Foreign commerce is still in its infancy, but an infancy of herculean proportions, as the following table shows:

INCREASE OF EXPORTS AND IMPORTS.

Year.	Total exports and imports. £31,000,000	Increase per cent.	Inc. per ct. per annum.
1880.....		47.80	8.40
1844.....	45,759,000	50.00	8.33
1850.....	68,758,000	62.60	12.52
1855.....	111,797,000	42.00	8.40
1860.....	168,810,000		

The advance in the annual increase is very striking, being from $3\frac{1}{2}$ per cent. per annum in the infancy of railways to 8 and 12 per cent. when their extension was proceeding rapidly. Before the introduction of railways America possessed a very extensive system of canals, which amounts to nearly 6,000 miles. At the present time both canals and railways are crowded with traffic. The following table shows the relation between the growth of trade and the increase of means of communication:

PROPORTION OF EXPORTS AND IMPORTS TO RAILWAYS AND CANALS.

Year.	Canals (6,000 miles) and railways open.	Total ex- ports and im- ports.	Exports and im- ports per mile.
1880.....	6,040	£31,000,000	5,120
1844.....	10,810	45,759,000	4,437
1850.....	13,475	68,758,000	5,102
1855.....	23,398	111,797,000	4,778
1860.....	34,770	168,810,000	4,867

Thus, in the United States, as well as in England, France and Belgium, the exports and imports bear a distinct relation to the miles of communication open, but lower in amount than in the European countries, as was only likely from the thinner population.

Vast as is the mileage of the American railways, it is by no means near its highest point. The lines in construction, but not yet completed, are stated to be more than 15,000 miles in length, a larger number than the whole mileage of the United Kingdom, completed and uncompleted.

The manner in which these lines are made is very remarkable. The United States are very thinly populated, not containing on an average more than 32 persons per square mile in the Northern States, and 11 in the Southern. Even the most populous Northern States have only 90 per

sons per square mile, while England and Wales have 347 per square mile. A less expensive railway, of smaller gauge, was therefore necessary, and the lines are almost invariably "single tracks." Their first cost have averaged from £7,000 up to £15,000 per mile, or about one-third of the expenditure in England. Of course they are very inferior in weight of rails and in sleepers, ballasting, stations, and efficiency. Even this expense was difficult to provide for where the inhabitants are so widely scattered. But in America the greatest encouragement is given to railroads, and every facility is afforded for their extension, as they are considered the most important sources of wealth and prosperity. Shares are taken largely by the inhabitants of the district traversed, land is often voted by the State, and the cities and towns find part of the capital by giving security on their municipal bonds.

I must not omit to mention the great Pacific railways, one of which is now being constructed from the State of Missouri for a distance of 2,400 miles across Kansas, Nebraska, Utah, and Nevada, to San Francisco, in California. It receives from the general government subsidies of £3,300, £6,600, or £9,900 per mile, according to the difficulty of the ground, besides enormous grants of land on each side of the line. When this railway is completed, the journey from Hong Kong to England will be made in thirty three days instead of the present time of six weeks, and it is anticipated that a large portion of our Chinese traffic will pass by this route.

No one can study the United States without being struck by the great railway future which lies before them, when their immense territories are more thickly peopled, and their mineral resources and manufactures have been developed. The distances to be traversed are so vast, and the traffic to be carried will be so enormous that the railways of the United States will far exceed in extent, and in the trade which will pass over them, anything that has hitherto been known in the history of the world.

X.—RAILWAYS AND FREE TRADE.

In the preceding sections I have endeavored to describe the progress of railway extension in England, France, Belgium and the United States, the four countries where it has received the greatest development, and I have pointed out the very great increase of commerce and national prosperity which has been its result. But in the case of England, I am bound to meet a very probable objection. I shall be asked, why do you attribute this increase of commerce mainly to railways? Was it not caused by free trade?

The general opinion undoubtedly is, that free trade is the principal cause of the immense increase since 1842 of English commerce. We see this opinion expressed every day in newspapers and reviews, in speeches and parliamentary papers. I hold in my hand a very able memorandum, lately issued by the Board of Trade, respecting the progress of British commerce before and since the adoption of free trade, in which the same view is taken, and in which the statistics of the exports and imports since 1842 are given as mainly the result of free trade. It is true that there is a reservation, acknowledging "that the increase of productive power and other causes have materially operated in effecting this vast development." But

in the newspaper quotations and reviews this reservation was left out of sight, and the striking results recorded in the memorandum were entirely ascribed to free trade.

While acknowledging to the full the great benefits and the enlightened principles of free trade, I have no hesitation in saying that this popular view is a popular exaggeration, which it is the duty of statisticians to correct, and I think that my reasons will be considered satisfactory by this Society. In the first place, the development of English commerce began in 1834, before the free trade, but simultaneously with railways; and between 1833 and 1842 the exports and imports increased from a stationary position at £85,500,000, to £112,000,000, or 31 per cent. In the next place, from 1842 till 1860, England was the only country which adopted free trade. If England had also been the only country that made such enormous progress, we might safely conclude that free trade was the chief cause of so great a fact. But this is not the case. England is only one of several countries which made an equal advance during the same period, and none of those countries except England had adopted free trade. The total increase of exports and imports from 1842 to 1860 in the three first countries described in this paper, and from 1844 to 1860 in the United States, was as follows :

Country.	1842.	1860.	Increase per cent.
England.....	£112,000,000	£378,000,000	234
France.....	86,280,000	282,200,000	169
Belgium.....	19,400,000	72,120,000	272
	1844.		
United States.....	45,767,000	158,810,000	305

Thus, the English rate of increase is only third in order, and is exceeded both by Belgium and the United States. If the latter country is objected to on account of its rapid growth in population by immigration, still Belgium remains, exceeding the English rate of increase by 36 per cent. Look at the argument by induction. Here are four countries under the same condition of civilization, and having access to the same mechanical powers and inventions, which far outstrip contemporary nations. It is a probable conclusion that the same great cause was the foundation of their success. What was that common cause? It could not be free trade; for only one of the countries had adopted a free trade policy. But there was a common cause which each and all of those four countries had pre-eminently developed—the power of steam—steam machinery, steam navigation and steam railways. I say then that steam was the main cause of this prodigious progress of England, as well as of the other three countries.

But I will go a step farther. Steam machinery had existed for very many years before 1830, and before the great expansion of commerce Steam navigation had also existed for many years before 1830, and before the great expansion of commerce, and steam navigation was unable to cope with the obstacle which before 1830 was so insuperable, viz.: the slowness and expense, and limited capacity of land carriage.

I come then to this further conclusion, that the railways which removed this gigantic obstacle, and gave to land carriage such extraordinary rapidity and cheapness, and such unlimited capacity, must have been the main agent, the active and immediate cause of this sudden commercial development.

This conclusion appears to become a certainty when I find, from the investigation through which we have traveled, that in every one of these four great examples, the rapid development of commerce has synchronised with an equal rapid development of railways—nay, that the development of commerce has been singularly in proportion to the increased mileage of railways—so that each expansion of the railway system has been immediately followed, as if by its shadow, by a great expansion of exports and imports.

But I will not leave the case even here. Consider what are the burdens which press upon trade and manufactures. If our merchants could be presented with that wondrous carpet of the Genii of the "Arabian Nights," which transported whatever was placed upon it in one instant through air to its farthest destination, overleaping mountains and seas and custom houses, without expense or delay, we should have the most perfect and unburdened intercourse. But see what barriers and burdens there are in actual fact, when we trace the journey of the raw material, such as cotton or wool, to the British manufacturer, and its export as a manufactured article.

BURDENS UPON IMPORTS AND EXPORTS.

Raw Material—

1. Inland carriage to the sea.
2. Voyage to England.
3. Import duty.
4. Inland carriage of the manufacturer.

Manufactured Article—

5. Inland carriage to the sea.
6. Voyage to foreign country.
- Import duty.
- Inland carriage to the customer.

Here are eight distinct burdens or charges increasing the price of our manufactures to the foreign customer. Out of these—

Four are inland carriage,

Two are navigation, and only

Two are custom house duties.

Now, except in the case of prohibitory duties, it was undoubtedly the case that, before the introduction of railways, inland carriage was the most expensive of these burdens. In countries unprovided with canals, a very few miles of road transport was an absolute prohibition. It is so in many parts of India, Spain and Turkey at the present day. In countries provided with canals, rates were high, and transport slow, and always coming to a dead lock. Hence the relief afforded by railways, both in cheapness and saving of time, was far beyond any relief by free trade in taking off moderate duties.

In a vast number of cases railways did more than cheapen trade, they rendered it possible. Railways are the nearest approach that human ingenuity has yet devised to that magic carpet of the "Arabian Nights," for which I ventured to express a wish.

For all these reasons I maintain that we ought to give railways their due credit and praise, as the chief of those mighty agents which, within the last thirty years, have changed the face of civilization.

XI.—RAILWAYS AND NATIONAL DEBTS.

In one important point the nations of Latin race have stolen a clear march upon the nations of Teutonic origin, of England, Germany and the United States, by their appreciation and adoption for railways of the principle of a sinking fund. The idea owes its origin to the semi-Latin, semi-Teutonic intellect of Belgium. When the Belgian Government, in 1834, projected a system of State railways, to be constructed with money borrowed by the State, they provided for the extinction of the loans in fifty years by an annual sinking fund. The amount borrowed was nearly £8,000,000 sterling, and the whole will be paid off in 1884, after which date the whole profits of the State lines, 352 miles in length, will become part of the revenue of the nation. But so good an investment are these lines that their present net income is £525,000 a year, and is increasing at a rate which promises in 1884 a net revenue of £960,000, a sum which will be sufficient to pay the interest on the whole national debt, now £26,000,000. Besides this, the conceded lines, 1,000 miles in length, will become amortized and become State property in 90 years from the beginning of their concessions, and the profits on a capital of more than 13,000,000 will then be available toward the State revenue.

This system was copied by France, and imitated from her by the other Latin nations, Spain, Portugal and Italy, as well as by the non-Latin States of Austria and Holland. All these countries, at the end of various terms of 99, 90 and 85 years will practically pay off a large portion of their national debt. Improvident Spain will pay off about £40,000,000 out of her debt of £164,000,000. Heavily burdened Austria will practically abrogate something like £65,000,000 out of her debt of £250,000,000. Italy will wipe out a large portion of her debt of £176,000,000.

But the most remarkable example is France; and I will endeavor to explain as briefly as possible the working of the French system. In France the railways are conceded for 99 years, but it is one of the conditions of the grant that all the capital whether in shares or debentures, shall be paid off within that term by an annual *amortissement*, or sinking fund. The small amount of this annual payment is very extraordinary. The French rate of interest is 5 per cent., and the annual sinking fund necessary to pay off 100 francs in 99 years is as nearly as possible '04. Put into the English form, for the sake of clearness, this means that the annual sinking fund necessary at 5 per cent. to redeem £100 in 99 years is only 1s. per annum. As debentures are issued in France for less than 99 years when part of the concession is run out, the amount of the sinking fund varies, but it is usually said to amount on the average to one-eighth per cent. As the whole expended capital of French railways represented by shares and debentures, is £233,000,000, it follows that the total annual sinking fund paid by the French companies for the redemption of that sum is less than £300,000. The result is marvellous, that for £300,000 the French nation will acquire, in less than 99 years, an unencumbered property of £233,000,000 sterling. But this is not all. The railways represented by that £233,000,000 sterling produced in 1865 a net revenue of about £12,500,000. Before 1872 further railways will have been completed, which will be amortized at the same date as their parent lines, and will produce before many years a net income of £4,000,000, making a total net income of the French railways

16,500,000. But the total charge of the French national debt in 1865 was only £16,000,000. So that France has now a system in operation which, in less than 90 years from the present time, will relieve the country from the whole burden of her national debt of nearly £500,000,000.

Is it allowable in me to ask, why are we doing nothing of the sort? When so many other nations are paying off by means of their railways a portion, or the whole of their national debts, why are we, with all our wealth and resources, to do nothing? A scheme of amortization suited to the habits of the English people, is perfectly possible, and the peculiar position of railway companies at the present moment renders it easy to carry out. I will say nothing about debentures, because a plan is now before the Government dealing with them. But, I say, respecting Share Capital, that it would be perfectly practicable for the State to become the possessor of a large proportion of this stock in a comparatively short time, and at no great expense. An annual sinking fund of 5s. per cent will pay off £100 in seventy-two years, reckoning only 4 per cent. interest. Hence, in seventy-two years, an annual sinking fund of £500,000 a year, will pay off £200,000,000. The government duty on railways amounts to £450,000 a year, and will soon reach £500,000. My proposal would be to make this a sinking fund towards purchasing £200,000,000 of preference and other stock, and let it be invested annually by the Board of Trade, or by commissioners appointed for the purpose, like those appointed for the national debt. Instead of cancelling each share as it is purchased, let it be held in trust for the nation, and the dividends applied every year in augmentation of the sinking fund. In this manner, at the end of about seventy-two years £200,000,000 of preference and ordinary share capital would become the property of the nation, and its dividends become applicable to the interest of the national debt. As railway dividends average 4 to 4½ per cent., the dividends on the redeemed capital would pay the interest on more than £250,000,000 consols, and be equivalent to the redemption of that amount of our national debt.

I believe that this is a practical scheme. In a slightly different form it is now being carried out in France, Belgium and other continental states. I trust that before long we shall cease to be almost the only nation in Europe which does not act on the principle "that railways are the true sinking fund for the payment of the national debt."

The advantages of such a sinking fund over a sinking fund invested in consols, are threefold:

1. It would be invested annually in railway capital at a higher interest, and thus accumulate more rapidly.

2.—It would have a different primary object, viz., the purchase of a State interest in railways, and would therefore be more likely to enlist popular feeling in favor of its maintenance.

3.—It would be distinct and separate from the national debt, and not under the same control, and would therefore be less liable to be diverted to the financial necessities of the hour.

Perhaps it will be said that a railway sinking fund is unsuited to the character and habits of the English people. But surely it is our character to be prudent and to pay off encumbrances, and to adopt the best means of accomplishing that object. Surely it is not right in a great and wealthy and enlightened nation like England to incur the reproach of being spendthrift of her resources and reckless of her debts.

XII.—FURTHER RAILWAY EXTENSION.

England is undoubtedly the country in the world best provided with railways. The statistical comparison stood thus at the end of 1865:

RAILWAYS COMPARED WITH AREA AND POPULATION.

Country.	Railway Miles Open.	Square Miles per Railway Mile.	Population per Railway Mile.
England and Wales.....	9,251	6½	2,186
1. Belgium	1,850	8	3,625
2. United Kingdom	12,289	9	2,206
3. Switzerland	778	19	3,257
4. Prussia and Germany (except Austria). ..	8,589	20	3,525
5. Northern United States (Except Kansas, Nebraska and Oregon)	24,883	25	801
6. France	3,184	26	4,607
7. Holland	873	29	9,066
8. Italy	2,889	41	9,084
9. Austria	3,785	63	9,875
10. Spain	2,721	67	5,991
11. Portugal	419	67	8,555
12. Southern United States	10,800	92	1,025
13. Canada	2,589	136	987
14. India	3,186	287	42,573
Total of the 14 countries.....	83,495	....	....

But England has a much greater proportion of double lines and a larger number of trains on each line; while, on the other hand, Belgium and other continental nations have lower fares and give greater accommodation to third and fourth class passengers. Both parties have something to learn—they to admit the principle of competition and increase the number of railways; we to provide cheap conveyance for the masses, without the clumsy device of excursion trains.

But now comes the question—do England and Belgium need further railways, or are they already sufficiently provided? It may partly be answered by the fact that in England there are about 3,500 miles authorized by Parliament which have not yet been made, and that in Belgium there are 450 miles (equal to 4,500 in England) conceded but not constructed. And we may also point to the circumstance that in England and Wales there were, in 1865, 6,081 miles of double line against 3,170 miles of single, showing that there is a want of cheap lines through rural districts. A glance at the railway map will confirm this inference. The lines run in the direction of the metropolis or some great town, and there are few cross-country lines. The distance between the lines supports this conclusion. Deducting the manufacturing districts, which are crowded with a railway network, the remainder of the country gives an average of about fifteen miles between each mile of railway. The average ought not to be more than eight or ten miles.

The advantage of a railway to agriculture may be estimated by the following facts. A new line would, on an average, give fresh accommodation to three and a-half miles on each side, being a total of seven square miles, or 4,560 acres for each mile of railway. It would be a very moderate estimate to suppose that cartage would be saved on one ton of pro-

duce, manure, or other articles for each acre, and that the saving per ton would be five miles at 8d. per mile. Hence the total annual saving would be £768 per mile of railway, which is 5 per cent interest on £15,000. Thus it is almost impossible to construct a railway through a new district of fair agricultural capabilities without saving to the landowner and farmer alone the whole cost of the line. Besides this, there is the benefit to the laborers of cheap coals and better access to the market. There is also the benefit to the small towns of being put into railway communication with larger towns and wholesale producers. And there is the possibility of opening up sources of mineral wealth.

Somebody ought to make these agricultural lines, even though they may not pay a dividend to the shareholder. But who is that somebody to be? The great companies will not take the main burden lest they should lower their own dividends. The general public will not subscribe, for they know the uncertainty of the investment turning out profitable. And notwithstanding the able letters signed "H" in the *Times* some months ago, I cannot advocate the necessarily wasteful system of contractors' lines, or believe in the principle "Never mind who is the loser, so that the public is benefitted." Railway extension is not promoted in the long run by wasteful financing and ruinous projects. On the contrary, such lines injure railway extension, by making railways a bye-word and depreciating railway property, and they render it impossible to find supporters for sound and beneficial schemes.

The proper parties to pay for country lines are the proprietors and inhabitants of the districts through which they pass. They are benefitted even if the line does not pay a dividend. They have every motive for economical construction and management, and can make a line pay where no one else can. But they will not subscribe any large portion of the capital as individuals. Very few will make a poor investment of any magnitude for the public good, though all might be ready to take their part in a general rate. Almost every country but our own has recognized the fact, and legislated on this basis, by empowering the inhabitants of a district which would be benefitted to tax themselves for the construction of a railway. I have shown that in France either the department or the commune may vote a subvention out of their public funds, and that in the United States the municipalities vote subsidies of municipal bonds. In Spain the provinces and the municipalities have the power to take shares or debentures, or if they prefer it, to vote subventions or a guarantee of interest. In Italy the municipalities do the same thing. Why should not England follow their example, and authorize the inhabitants of parishes and boroughs to rate themselves for a railway which will improve their property, or empower them to raise loans on the security of the rates, to be paid off in a certain number of years by a sinking fund, as is done for sanitary improvements? I see no other way of raising the nucleus of funds for carrying out many rural lines which would be most beneficial to the country.

I can give a remarkable instance of the benefits caused by an unremunerative railway. In 1834 the inhabitants of Whitby projected a line from Whitby along the valley of the Esk to Pickering, half way to York. The line was engineered by George Stephenson, and was originally worked by horse-power and carriages on the model of the four-home

coaches. But though considered at that time one of the wonders of the world, the line was utterly unprofitable, and the Whitby people looked upon it as a bad speculation, much as the shareholders of the London, Chatham and Dover look on their present property. The railway was ultimately sold to the North Eastern Company; but though the shareholders got no advantage, somebody else did. Farmers and laborers came to market in Whitby, and got coals and other necessities at reduced rates, while they sold their produce better. Very soon rents began to rise, and I find the total rise since the construction of the railway has been from an average of 15s. per acre up to 22s., or nearly 50 per cent. But far greater consequences resulted. The cliffs at Whitby were known to contain nodules of ironstone, which were picked up and sent to iron-works on the Tyne. Soon after the opening of the railways, George Stephenson and a number of Whitby gentlemen formed a company, called the Whitby Stone Company, for working stone quarries and ironstone mines at Grosmont, about six miles up the railway. At first the ironstone was very badly received by the iron foundries, and it was only after long and patient perseverance that the company got a sale for what they raised. It was not till 1844 and 1846 that the merits of the Cleveland ironstone were fully acknowledged and large contracts entered into for its working throughout the district. Thus the unprofitable Whitby and Pickering Railway opened up the Cleveland iron district and caused the establishment of a very large number of foundries and the employment of thousands of workmen, and has added very materially to the wealth of England.

XIII.—CONCLUSION.

From the facts which have been brought forward I draw the following conclusions:

1.—Railways have been a most powerful agent in the progress of commerce, in improving the condition of the working classes and in developing the agricultural and mineral resources of the country.

2.—England has a more complete and efficient system of railways than any other country, but is not so far ahead that she can afford to relax her railway progress and to let her competitors pass her in the race.

3.—England ought to improve the internal organization of her railways, both as to finance and traffic, and to constitute some central authority with power to investigate and regulate.

4.—A Sinking Fund should be instituted to purchase for the State a portion of the railway capital, and so to lighten the charge of the national debt.

5.—Power should be given to parishes and boroughs to rate themselves in aid of local railways, in order to facilitate the construction of country lines.

6.—England, as a manufacturing and commercial country, is benefited by every extension of the railway system in foreign countries, since every new line opens up fresh markets and diminishes the cost of transporting her manufactures.

I cannot conclude without saying a word on the future of railways. The progress of the last thirty-six years has been wonderful, since that period has witnessed the construction of about 85,000 miles of railway.

The next thirty-six years are likely to witness a still greater development and the construction of far more than 85,000 miles. We may look forward to England possessing, at no distant date, more than 20,000 miles, France an equal number and the other nations of the continent increasing their mileage until it will bear the proportion of 1 railway mile to every 10 square miles of area, instead of the very much less satisfactory proportions stated in the comparative table. We may expect the period when the immense continent of North America will boast of 100,000 miles of line, clustered in the thickly-populated Eastern States and spreading plentifully through the Western to the base of the Rocky Mountains and over to California and the Pacific. We may anticipate the time when Russia will bend her energies to consolidating her vast empire by an equally vast railway network. We may predict the day when a continuous railroad will run from Dover to the Bosphorus, from the Bosphorus down the Euphrates, across Persia and Beloochistan to India, and from India to China. We may look for the age when China, with her 350,000,000 of inhabitants, will turn her intelligence and industry to railroad communication.

But who shall estimate the consequences that will follow, the prodigious increase of commerce, the activity of national intercourse, the spread of civilization, and that advance of human intelligence foretold thousands of years ago by the prophet upon the lonely plains of Palestine, "when many shall run to and fro upon the earth, and knowledge shall be increased!"

NOTE.—Since reading this paper before the Society, my attention has been called to an article on French railways in the *Revue des deux Mondes* of 1st January, 1866, by M. Lavollée, which, written many months previously, confirms most strikingly my conclusions, especially those which relate to the effect of railways on French commerce and on the welfare of the working classes. It adds many eloquent reflections on railways in relation to civilization and progress, which are well worth perusal.

In the discussion which followed the reading of my paper, the President expressed a wish that I should add information respecting fares and rates and other points connected with railway working. But I find the subject too extensive for a cursory notice, and the forthcoming Evidence and Report of the Royal Commission on Railways will afford opportunity and material for a more complete survey, which, I trust, will be undertaken by some member of the Society connected with railways.

DEBTS AND TAXATION OF OUR LARGE CITIES.

We have been at considerable pains to procure statistics throwing light upon the changes in the fiscal condition of our large cities within the last six years. Owing to the incompleteness of returns, our material for this purpose is much less comprehensive than we could have desired. The figures obtained, however, have been derived from official sources and will at least afford data for general estimates approximating accuracy. We are enabled to present complete details of population, valuation and

indebtedness from fourteen of the principal cities, and the rule found to obtain in these cases may perhaps be assumed to apply to our cities generally. The valuation given is in each case that made for the purpose of local assessments, and although the best attainable, is well known to fall much below the real value of the property—a fact for which due allowance must be made in estimates. On the other hand, the figures representing the indebtedness of the cities may lead to exaggerated estimates in those cases where the corporations hold assets in the shape of securities, productive real estate or sinking funds. Our chief purpose, however, being to ascertain the changes in the amount of the city debts, as it may be assumed that no important fluctuations have occurred in the list of assets, the omission of this data is not material to the result sought. The following table shows the population, valuation and debt of fourteen principal cities in 1860 and 1866 respectively:

CITIES.	Population.—		Valuation.—		Indebtedness.—	
	1860.	1866.	1860.	1866.	1860.	1866.
New York... <i>N. Y.</i>	813,669	900,000	578,631,707	737,960,908	28,498,644	41,701,176
Philadelphia... <i>Penn.</i>	565,529	623,083	.....	.....	21,029,735	35,165,731
Brooklyn... <i>N. Y.</i>	268,661	300,000	105,174,507	123,497,840	7,643,809	10,023,419
Baltimore... <i>Md.</i>	313,418	339,070	119,461,715	129,001,008	17,908,865	11,923,656
Boston... <i>Mass.</i>	177,840	192,334	276,861,000	371,892,775	9,392,799	12,845,376
Cincinnati... <i>Ohio.</i>	161,014	188,263	91,961,375	130,745,993	3,783,800	3,203,000
St. Louis... <i>Mo.</i>	160,773	204,527	102,408,280	128,877,300	5,006,700	5,644,000
Chicago... <i>Ill.</i>	109,390	200,418	37,053,513	85,953,350	2,065,000	5,397,464
Buffalo... <i>N. Y.</i>	81,129	94,502	.....	.....	679,000	654,009
Newark... <i>N. J.</i>	71,914	87,413	30,045,389	.....	316,000	833,000
Louisville... <i>Ky.</i>	68,033	100,000	27,873,003	42,104,569	3,001,000	4,113,000
Albany... <i>N. Y.</i>	63,367	62,613	24,963,398	.....	1,570,860	2,483,500
San Francisco... <i>Cal.</i>	63,803	80,000	35,800,639	75,973,470	2,992,519	4,947,398
Providence... <i>R. I.</i>	50,605	54,596	61,113,300	.....	1,400,000	1,400,000

A glance at the column of valuation will show that the increase has not kept pace with the actual increase of the value of property. In nearly all the large cities real estate is now worth nearly double its value in 1860; yet the increase in the official figures shown above does not average over 30 per cent. Perhaps it may be safely assumed that the assessment valuation, considering what it omits as well as what it underestimates, does not represent more than half the real value of property in the several cities.

The aggregate indebtedness of the above cities has been increased during the six years from about \$103,500,000 to about \$149,500,000. This gives an average increase of about 45 per cent. In the case of the Western cities the increase has been comparatively light. Cincinnati has reduced its debt \$500,000, while St. Louis has added only \$640,000 to its indebtedness. In the case of Chicago there is a very decided increase, but chiefly owing to the construction of extensive public works. The increase is in the largest ratio in the cities of New York, Philadelphia, Boston, Brooklyn and Baltimore, where heavy debts have been incurred for military purposes. In order to estimate the relation of the valuation and debts of the cities to their respective populations, it is necessary to divide each item by the total populations; by which process we

* No proper valuation stated in reports.

obtain the following result, showing the valuation and the debt per head of the population of each city:

CITIES.		Valuation.		Indebtedness.			
		Per capita Pop.		Per capita.		Per cent of Val.	
		1860.	1866.	1860.	1866.	1860.	1866.
New York.....	N. Y.	\$ 709	\$ 830	\$28.87	\$46.33	4.07	5.65
Philadelphia.....	Pa.	.....	.....	43.49	55.58	.....	.....
Brooklyn.....	N. Y.	394	411	23.63	23.41	7.37	8.11
Baltimore.....	Md.	553	581	84.39	91.73	14.96	15.77
Boston.....	Mass.	1,357	1,934	52.81	66.80	3.59	3.45
Cincinnati.....	Ohio	280	430	23.29	16.57	4.08	2.45
St. Louis.....	Mo.	637	631	31.14	27.69	4.99	4.45
Chicago.....	Ill.	340	429	19.18	26.93	5.05	6.39
Buffalo.....	N. Y.	.....	.....	7.13	.....	.....	.....
Newark.....	N. J.	418	.....	4.89	9.58	1.05	.....
Louisville.....	Ky.	409	431	44.11	41.18	10.76	9.55
Albany.....	N. Y.	394	.....	21.79	.....	6.39	.....
San Francisco.....	Cal.	630	949	51.69	61.94	8.36	8.51
Providence.....	R. I.	1,306	.....	27.63	.....	3.39	.....

Here, again we must caution our readers against a too strict use of the column of valuations. The usage in the different cities in making this assessment varies so widely that the differences in the amount of estate per head shown above must be accepted with very broad allowances. The fact, for instance, that the valuation *per capita* in Boston is \$1,934, and in New York only \$820, is to be chiefly accounted for by the circumstance that in the former city the official valuation runs closely upon the real value, while in the latter it falls very far below. The column showing the increase of debt per head of the population is of special interest. Upon this basis of comparison, which is the true one, the Western cities, except Chicago, indicate a falling off in the ratio of indebtedness. In the Eastern and Middle States the increase is very large. In New York city the ratio has risen within the six years from \$28.87 per head to \$46.33; in Philadelphia, from \$42.49 to \$55.52; in Baltimore, from \$84.29 to \$91.73; and in Boston from \$52.81 to \$66.80; while in San Francisco, which has been supposed to have felt the pressure of the times lightly, the change has been from \$52.69 to \$61.84. In explanation of the high figures assigned to Baltimore, it should be stated that the city holds valuable interest-bearing assets, which would reduce its net debt to very moderate dimensions. The same fact is also true, only to a less extent, of some of the other cities.

This additional indebtedness, however, affords an imperfect criterion of the real augmentation of the burthens of our city population. Not only has the interest account been increased to an extent corresponding with the above shown increase of debts, but the local expenditures also have been largely, not to say extravagantly augmented. We must, therefore, look to the tax list for evidence of the weight of our present burthens compared with those of 1860. For this purpose we select the only six cities from which we are in possession of complete returns. The following is a statement of the amount of taxes assessed in the cities named for city and county purposes for the years 1860 and 1866, and their relation to population:

	Amount		Rat' p. cap.	
	1860.	1866.	1860.	1866.
New York.....	\$7,649,873	\$15,006,896	\$9.40	\$17.34
Philadelphia.....	2,324,359	5,084,530	4.13	8.17
Boston.....	2,394,538	4,294,303	12.90	21.98
Cincinnati.....	1,328,631	2,010,323	8.06	10.39
Chicago.....	373,315	1,719,064	8.43	8.57
San Francisco.....	793,666	1,490,667	14.03	18.71

The increase in the city and county taxation shown in these figures is astounding. In New York city these taxes now amount to \$17.34 per head, against \$9.40 in 1860 in Boston the increase is \$9.08 per head; in Philadelphia \$4.04; in Cincinnati \$2.33; in Chicago \$5.15, and in San Francisco \$4.68. In order, however, to ascertain the *whole* amount of taxation to which our city populations are subject, it is necessary to add to the foregoing the share *per capita* of taxes levied for State purposes, and also of federal imposts. The amount of State taxes levied in these States, and the proportion *per capita*, compare as follows:

	—Amount of taxes.—		—Tax per capita.—	
	1860.	1866.	1860.	1866.
New York.....	\$4,876,167	\$17,829,042	\$1 18	\$1 64
Pennsylvania.....	2,383,967	4,060,148	0 61	1 27
Massachusetts.....	901,010	1,187,581	0 78	2 49
Ohio.....	2,594,718	2,667,167	1 50	1 50
Illinois.....	1,325,722	2,514,022	1 07	1 16
California.....	1,121,063	2,232,422	2 90	4 94

The following is a statement of the population, taxation, customs and debt of the United States in 1860 and 1866, and their relation to population:

	1860.	1866.	1860.	1866.
Population.....	31,500,000	35,000,000		
Internal revenue.....		\$309,326,813	<i>per capita.</i>	\$....
Customs.....	52,197,512	179,046,651	"	1 00
National debt.....	64,769,703	2,752,425,572	"	2 06

The whole taxation per head of the populations of the respective cities may be thus summarized:

	—City & Co.—		—State.—		—Federal.—		—Total.—	
	1860.	1866.	1860.	1866.	1860.	1866.	1860.	1866.
New York.....	\$9 40	\$17 34	\$1 18	\$1 64	\$1 69	\$1 85	\$12 12	\$23 18
Philadelphia.....	4 13	8 17	0 81	1 27	1 69	1 85	6 63	11 39
Boston.....	12 80	21 88	0 78	2 40	1 09	1 25	15 34	25 42
Cincinnati.....	8 06	10 39	1 50	1 60	1 69	1 85	11 25	13 54
Chicago.....	2 42	8 97	1 07	1 17	1 09	1 25	6 18	11 09
San Francisco.....	14 08	18 71	2 99	4 94	1 69	1 85	18 71	27 02

It will appear from a comparison of these figures that the total taxation of our city population, so far as may be judged from the cities here instanced, has increased from about \$12 per head in 1860 to \$30 per head in 1866. There is considerable diversity in the proportions between the different cities, and the ratio of increase also varies materially at the several places; but this may be taken as the average augmentation of our burthens since the year antecedent to the war. Allowing five persons to each family, it would follow that the amount of taxation paid directly and indirectly by our city population is \$150 per family, against \$60 in 1860, showing an average increase of \$90 per family. This immense addition to our burthens must materially affect the social and political future of the country, and calls loudly upon the State and federal legislatures to retrench in every possible way the expenditures under their control

THE INSURANCE BUSINESS FOR 1866.

Proof sheets of the Report of the Superintendent of the Insurance Department of the State of New York for 1866, dated April 1st, 1867, have been sent us by the Superintendent the past week, and although the late date at which the report is presented to the public, like our State report on Railroads, takes away from it the value and interest which belong to new facts, it is still very interesting, not only as a part of the financial history of the past year, but also as affording useful lessons for the future. It is unfortunate that these State reports can not be issued at a period earlier than six months after the official statements of the companies contained in them are made. The information which is now published in July or August would be doubly valuable to all parties interested if published in January or February.

The year 1866, which witnessed the remarkable panic following the failure of Overend, Gurney & Co., in England, and the universal depression in business in the United States, was also a year of the severest losses insurance companies ever experienced. The Superintendent begins his report with the statement that no new joint stock fire insurance company was organized during the calendar year 1866. This is the only year since the passage of the general Insurance Act of 1849 (chap. 308) which has not witnessed the incorporation of at least one stock fire insurance company. This fact is a good indication of the unprofitable nature of the insurance business during that period.

From several tables, giving in detail the changes which took place in the companies of this State in the year, it appears that two companies were changed from mutual to stock companies; one casualty was changed to a fire company; five companies had their charter extended 30 years, pursuant to the general act; two companies increased their capital (three others have increased since January, 1867); requisitions have been made on the stockholders of seven companies to make up impaired capital, three of which were not responded to; five companies have reduced their capital since Jan. 1, 1867; thirty-three companies showed an impairment of capital Dec. 31, 1866, varying from 81.74 per cent. to 0.21 per cent.; ten companies which showed an impaired capital Jan. 1, 1866, repaired their capitals during that year; seventy-one companies show capitals intact, with surpluses varying between \$271,387 and \$15 and six companies discontinued business, and are closing up their affairs.

The present standing of the companies of this State we give in the Insurance Department of the CHRONICLE, but the table following, compiled from the report, shows the operations of these companies for the seven years 1860-66, inclusive; fire business being separately stated:

MARINE AND INLAND BUSINESS.

	Risks written.	Premiums received.	Losses paid.	Percentage of loss to pre- miums.	Per cent of loss to risks written.	Am't of risks \$1000.	Av. rate of pre'm to risks.
1860	\$30,879,892	\$551,158	\$408,507	73.87	.5045	158.23	.6375
1861	80,351,003	666,296	497,073	74.61	.6186	161.65	.8391
1862	110,949,672	875,825	453,166	51.64	.4075	945.97	.7843
1863	178,943,897	1,193,714	859,737	70.35	.4773	309.58	.6695
1864	253,714,936	2,292,830	1,543,898	67.37	.6079	164.50	.9057
1865	271,593,107	2,667,181	2,080,654	76.05	.7440	184.41	.9784
1866	378,880,008	4,353,805	3,900,709	87.97	1.0061	99.09	1.1443
Agg & av.....	1,351,600,000	12,578,318	9,553,180	76.03	.7071	141.48	.9900

FIRE BUSINESS.

1860	1,042,551,594	\$5,710,412	\$3,578,894	53.32	.3410	298.86	.6322
1861	1,087,112,596	6,161,507	3,374,115	53.14	.3183	313.71	.6360
1862	1,300,731,120	6,866,855	4,237,157	61.56	.2531	394.05	.6725
1863	1,560,637,139	8,997,315	3,249,945	37.27	.2146	465.68	.6925
1864	2,342,666,111	12,236,789	7,195,271	54.00	.3071	235.63	.6669
1865	2,519,595,187	17,093,986	12,045,798	70.65	.4799	305.40	.6723
1866	2,753,428,107	20,736,947	15,312,751	73.67	.5561	179.54	.7349
Agg & av....	12,444,836,864	70,890,809	42,964,968	61.32	.3996	354.05	.6439

It appears from the above that the losses have increased to an alarming extent within the past two years. Indeed, without the figures the fact is too well known to the public. The remedy to be applied to save insurance companies from total annihilation has been discussed in these columns. Mr. Barne's evidently inclines to the plan of not insuring property to its full value as the surest safeguard against incendiary fires. His argument is forcible and is especially worthy of consideration from the fact that it is based upon the simplest principles of common sense, and not upon the assumption that a large proportion of insurers are scoundrels. He remarks as follows:

In all insurance economics, the relations of underwriter and policy holder should be so contrived, that in no contingency could the latter gain by a loss on his policy; the pecuniary interest of the insured should never conflict with his duty to prevent, by all possible means, any loss under his policy.

In fire insurance, the downward tendencies of a declining market and the nervous apprehensions of an approaching financial crisis have, especially on mercantile risks, often made it for the pecuniary interest of the insured that a destructive fire should happen. Thus, with low or diminishing net premiums, the moral hazards have been woefully increased, and the sad results are now historic, in the years 1865 and 1866, two consecutive years of excessive and unprecedented loss.

To the extent that fire insurance relaxes the vigilance and natural guardianship of the owner over his own property, and prevents the construction of fire-proof buildings and the discovery of rapid means of extinguishing conflagrations, the political and social economist and statesmen cannot hesitate emphatically to denounce and condemn it. The natural guardian of property should never lose an interest in its preservation. No care of children can, as a general rule, equal parental care, and no watchman is so continuously vigilant as the owner. When property is fully insured and the premium paid, how can an underwriter reasonably expect that, with all the harassing cares and solitudes of modern business life, the owner will watch and guard and protect it against hazards, for the happening of which he has already paid a strong and wealthy corporation? When companies ask and expect this solicitude and surveillance on the part of a policy-holder fully insured, they violate the plainest axioms of business and common sense. This, when dealing with men of good principles and thorough honesty; and no mathematics can compute how much these hazards are increased when dealing with elements of fraud, chicanes and land piracy.

Could the plan of partial insurance be carried out without seriously impeding the movements of commerce, and frequently resulting in losses to parties who are both careful and honorable, we should be inclined immediately to advocate its adoption as the surest means of protection to insurers. But we do not think it could be; the result of such a rule would leave innocent parties, particularly agents who have made advances, or others having only a partial or temporary interest in property, without any adequate safeguard against losses. In default of any suggestion which seems to meet all the difficulties of the case more satisfactorily we must adhere to the opinions previously expressed in

these columns, that the most effective, if not the only remedy that the case admits of is to be found in a thorough examination into the causes of all fires, and also in the non-payment of the amount insured until it is at least established that the loss is not of incendiary origin. A committee or board should be organized, the members to be chosen by all the companies, whose duty it should be to make the examination. If this were done the insurance business could be reduced to a proper basis, and no insurer would be called upon to pay for his neighbor's dishonesty or for his neighbor's greater risk. At present, no sooner does a company hear of a loss than it hurries to the insured with a check in hand to liquidate it, thus making a bid for future business. This is clearly wrong. Of course, no unnecessary impediment should be put in the way of prompt payment, but it is due alike to the company and its patrons that there should first be a proper investigation.

In conclusion Mr. Barnes says, and in this we believe all the most prudent writers will agree with him, that the remedy for weakness is increased strength; this must be reached either by means of new additional capital, or by a reserve of premiums paid for by the public but retained by the companies in some form as a Safety Fund, for the payment of extraordinary losses and contingencies. Whether the ownership of this fund is vested in the policy holders and represented by scrip, or in the stockholders and held as a "reserve fund," or in both and represented in any form, is of less consequence to the public than the practical initiation, on a broad and general basis, of some system of fortification besides capital, which is often strained beyond endurance, and besides the ordinary re-insurance reserve of *fifty* per cent to pay losses, which last year have actually taken over *seventy-seven* per cent. of premiums.

COMMERCIAL LAW.—No. 35.

OF LIFE INSURANCE.

(Continued from page 41, vol. 57.)

OF THE PURPOSE AND METHOD OF LIFE INSURANCE.

If A insures B a certain sum, payable at B's death to B's representatives, we have only the insurer and insured, as in other cases of insurance. But if A insures B a sum payable to B or his representatives on the death of C, although C is often said to be insured, this is not quite accurate; more properly, B is the *insured* party and C is the *life-insured*.

Life insurance is usually effected in this country in a way quite similar to that of fire insurance by our mutual companies. That is, an application must be first made by the insured; and to this application queries are annexed by the insurers, which relate, with great minuteness and detail, to every topic which can affect the probability of life. These must be answered fully; and if the insurer be other than the life-insured, there

are usually questions for each of them. There are also, in some cases, questions which should be answered by the physician of the life-insured, and others by his friends or relatives; or other means are provided to have the evidence of the physician and friends.

These questions are not, perhaps, precisely the same, in the forms given out by any two companies, and we do not speak of them in detail here. The rules as to the obligation of answering them, and as to the sufficiency of the answers, must be the same in life insurance that we have already stated in the chapters on Fire and Marine Insurance; or rather must rest upon the same principles. And the same rules and principles of construction therein set forth would doubtless be applied to the question whether a contract had been made, or at what time it went into effect.

OF THE PREMIUM.

If the insurance be for one year or less, the premium is usually paid in money, or by a note, at once. If for more than a year, it is usually payable annually. But it is common to provide or agree that the annual payment may be made quarterly, with interest from the day when the whole is due. Notes are usually given, but, if not, the whole amount would be considered due. If A, whose premium of \$100 is payable for 1856 on the 1st day of January, then pays \$25, and is to pay the rest quarterly, but dies on the 1st of February, the \$75 due, with interest from the 1st of January, would be deducted from the sum insured.

Provision is sometimes made that a part of the premium shall be paid in money, and a part in notes, which are not called in unless needed to pay losses. The greater the accommodation thus allowed, the more convenient it is obviously to the insured, but the less certain will he be of the ultimate payment of the policy, because, in the same degree, the fund for the payment consists only of such notes, and not of payments actually made and invested. There is a great diversity among the life insurance companies in this respect. But even the strictest, or those which require that all the premiums shall be paid in money, usually provide also that an amount may remain overdue, without prejudice, which does not exceed a certain proportion—say one-half or one-third—of the money actually paid in on the policy. This is considered, under all ordinary circumstances, safe for the company, because every policy is worth as much as this to the company. Or, in other words, it would always be profitable for the company to obtain a discharge of its obligation on a policy, by repaying the insured so small a proportion of what has been received from him.

OF THE RESTRICTIONS AND EXCEPTIONS IN LIFE POLICIES.

Our policies usually contain certain restrictions or limitations as to place; the life-insured (he whose life is insured for his own or another's benefit) not being permitted to go beyond certain limits, or to certain places. But there is nothing to prevent a bargain permitting the life-insured to pass beyond these bounds, either in consideration of new and further payments, or of the common premium.

So certain trades or occupations, as of persons engaged in making gun powder, or of engineers or firemen about steam-engines, are consid-

ered extra-hazardous, and as, therefore, prohibited, or requiring an extra premium.

The exception, however, which has created much discussion, is that which makes death by suicide an avoidance of the policy. The clause respecting duelling is plain enough; and no one can die in a duel without his own fault. But it is otherwise with regard to self-inflicted death. This may be voluntary and wrongful, or the result of insanity and disease for which the suffering party should not be held responsible. If a policy is accepted, which expressly declares that the sum insured shall not be payable if the life-insured die by his own hands, whether wilfully, knowingly or intentionally, or otherwise, there is no doubt that this clause would have its full and literal effect. But it might then be very difficult to limit its application. If, for example, a nurse gave a sick man a fatal dose by mistake, and he took the glass in his hand, and put it to his lips, drank, and died, it might fall within the language of such a provision, but could hardly come within any principle that would be recognized. Most persons die by their own act, in this sense; because most owe their death to some act or acts of indiscretion or exposure. The insurers may except any kind of death, as they may except death by a certain disease, or by a certain cause or in a certain place. The difficult question is, what is the construction and operation of law, where the clause is only "death by his own hands," or some equivalent phrase?

Although strong authorities favor that construction of any clause of this kind which would avoid the policy if death were actually self-inflicted, although in a state of insanity, the opposite view is also well sustained. And we are of opinion that the general principles of law of contracts, and of the law of contracts, and of the law of insurance particularly, would lead to the conclusion that "death by his own hands," but without the concurrence of a responsible will or mind, would not discharge the insurers, without a positive provision to that effect. We should put such a death on the same footing with one resulting from a mere accident, brought about by the agency, but without the intent, of the life-insured. As if, in a case like that above supposed, poison were sent to him by mistake for medicine, and he swallowed it under the same mistake.

It was once made a question, upon which high authorities differed, whether death by the hands of justice discharged the insurers when the policy made no express provision for this. Perhaps the weight of authority is in the affirmative. But the question has now but little practical importance, as our policies always express this exception.

Although a policy express that it shall not take effect until the premium is paid, this payment may be waived by the company. Taking a note would certainly be a waiver, if not a payment. The premiums, after the first, must be paid on the days on which they fall due. If no hour be mentioned, then it is believed that the insured would have the whole day, even to midnight. It is possible, however, that he might be restricted to the usual hours of business, and perhaps even to those in which the office of the insurers is open for business. In some policies a certain number of days is allowed for the payment of the premium. Then, if the loss happen after the premium is due and unpaid, and during this number of days and before they have expired, but after the loss, the premium is paid, the insurers should be bound by this subsequent payment of the premium by the insured

or his representatives, within the designated period. But if a certain time were allowed—say fifteen days—and the language of the policy be such as indicates the intention of the parties that the payment of the premium during the fifteen days is to be made by the life-insured personally, or during his life, then if he dies, and the premium is paid by his executors during the fifteen days, it has been held that the sum insured cannot be recovered of the company. And it has also been held, that where the printed proposals allow a certain time within which the premium may be paid, after it becomes due, and they are not referred to in the policy so as to become a part of the contract, if the life-insured dies after the premium becomes due, the executors cannot, by a tender thereof within the time allowed by the proposals, recover on the policy.

Where this time had elapsed, and the insurers, under their rules, had charged their agent with the amount—not hearing of the default from him, of which it was the agent's duty to notify them immediately—and the insured some days afterwards, paid the premium, which was received by the agent, it was held that this was not sufficient to renew the policy. This seems to be a harsh and extreme case; for if the insurers had themselves received and accepted the money from the insured, there seems no reason for doubting that this would have bound them. Practically, the utmost care is requisite on the part of the assured, to pay his premium as soon as it is due; and it is a wise precaution to pay it a little before.

This is the only proper and safe course. But we believe it to be not unusual for the insurers to accept the premium if offered them a few days after, and continue the policy as if it were paid in season, provided no change in the risk has occurred in the mean time.

The time of the death is sometimes very important. If the policy be for a definite period, it must be shown that the death occurs within it. If there were an insurance on a man's life for a year, and some short time before the expiration of the time he received a mortal wound, of which he died one day after the year, the insurer would not be liable. And the terms of the policy may possibly make it necessary to determine which of two persons lived longest; as if a sum were insured on the joint lives of two persons, to be paid to the representatives of the survivor. In the cases in which a question of this kind has been raised, there has been some disposition to establish certain presumptions of the law; as that the older survived the younger, or the reverse; or that the man survived the woman. We apprehend, however, that there is not, and cannot be, any other presumption of law on the subject than that, after a certain period of absence or silence, there is a presumption of death; and seven years has been mentioned in England and in this country as this period, and even sanctioned by legislation in New York. But all questions of this kind we regard as pure questions of fact. Whichever party rests his case upon death or life, at a certain time, must satisfy the jury upon this point, by such evidence as may be admissible, and sufficient. If the presumption of death in seven years is relied upon, it has been supposed that this strongly imports life during the whole of that period, and death only at the end, unless there be evidence of some particular peril at some definite time; but this may well be doubted. It is held in England, that where a person has not been heard of for seven years, there may be a presumption that he

is dead; but no presumption as to the time of his death, and the fact that he died at the expiration of seven years, or at any other time within the seven years, must be proved by the party relying on it.

OF THE INTEREST OF THE INSURED.

Every one insured in any way must have an interest in the subject-matter of the insurance. Any one may insure his own life; but if the insured and the life insured are not the same, that is, if the insured be insured on some other life than his own, interest must be shown. The English statutes have been supposed to require this; and although we have no precise legislation on the subject, it must be true in this country, then an insurance of any kind without interest is a mere wager, and a void contract.

The general rule is, that any substantial pecuniary interest is sufficient, although not strictly legal or definite. This has been held in the case of a sister, dependent on a brother for support; and the rule would be held to apply not only to all relations, but where there was no relationship, if there were a positive and real dependence. That is, any one may insure a sum on the life of any person on whom he or she really depends for support or for comfort.

So an existing debt gives the creditor an insurable interest in the life of a debtor. But if the debt be not founded on a legal consideration, it does not sustain the policy. And if the debt be paid before the death of the debtor, the insurers are discharged. So it was thought they were, on the general principles of insurance, if the debt were paid after the death of the debtor, and before the insurance is paid, or if on any ground, or by any means, the whole risk of the insured is terminated, and he cannot suffer any loss by the death of the life-insured. But recent adjudication in England has unsettled the former rule in regard to this question, and now it seems probable that the insurers would be required to pay under such circumstances. The leading case in England on this subject had a peculiar interest, from the celebrity of the life-insured, as well as from the severe examination to which it has recently been subjected. The plaintiffs were creditors of the Rt. Hon. William Pitt, and on November 29, 1803, obtained from the Pelican Life Insurance Company an insurance on his life for seven years, renewable from year to year for seven years, at an annual premium, which was duly paid, and the policy renewed, until his death, on January 23, 1805. The debt of Mr. Pitt, at the time the policy was effected, and during the rest of his life, was equal to the sum of £500, and at his decease amounted to £1,108 11s. 6d., which sum, he dying insolvent, was paid to the plaintiffs by his executors, the Earl of Chatham and the Lord Bishop of Lincoln, out of the money granted by Parliament for that purpose. The insurance company, against which this suit was brought on the policy, resisted payment, on the ground that the contract of life insurance was one of indemnity, and the plaintiffs having been fully paid had been fully indemnified. This defence was sustained. But in recent cases this case is said to have been wrongly decided, and that both the law and usage in England are otherwise; and now, it seems that the insurers would be held there, although the whole debt were paid. We think it would be so here; but in this country, life insurance companies sometimes avoid the question by making it a part of the contract, that the

insured creditor shall transfer to the company an amount of his debt equal to that for which he is insured ; and then if the debt is paid it must be paid to them.

A difficult question arises, when the insurers on the death of a debtor pay the sum they insured to the creditor, and the representatives of the debtor, or a surety or guarantor of the debt, defend themselves against the creditor on the ground that the debt is paid and fully discharged by the payment under the policy. The cases may not settle this question ; nor does the practice, so far as we are aware of it. The general principles of all insurance would lead to the conclusion that by such payment the debt is paid, so far as the creditor is concerned ; but that the insurers have by substitution the rights of the insured, and may prosecute, in his name, but for their own benefit, any action against the estate or representatives of the debtor which the creditor might prosecute himself. Recent adjudication, to which we alluded in the last paragraph, would, however, lead to a different conclusion, and deny the insurers any benefit from the debt, and oblige representatives of the debtor to pay it to the creditor, to whom it had been also paid by the insurers.

OF THE ASSIGNMENT OR A LIFE POLICY.

Life policies are assignable at law, and are very frequently assigned in practice. A large proportion of the policies which are effected, are made for the purpose of assignment ; that is, for the purpose of enabling the insured to give this additional security to his creditor. If the rules of the company or the terms of the policy refer to an assignment of it, they are binding on the parties. On the one hand, an assignment would operate as a discharge of the insurers, provided a rule or expressed provision gave this effect to the assignment. And, on the other, if the agreement were that the policy continue in favor of the assignee, even after an act which discharged it to the insured himself, as, for example, his suicide, the insurers would be bound by it.

It is an important question, what constitutes an assignment. The general answer must be, any act distinctly importing an assignment. And, therefore, a delivery and deposit of the policy, for the purpose of assignment, will operate as such, without a formal written assignment. So will any transaction which gives to a creditor of the insured a right to payment out of the insurance.

It seems, however that delivery is necessary. And where an assignment was indorsed on the policy, and notice given to the insurer, but the policy remained in the possession of the insured, it was held that there was no assignment. Where, however, the assignment was by a separate deed, which was duly executed and delivered, this is an assignment of the policy, without actual delivery of the policy itself. And a mere verbal promise to assign, a valuable consideration being received for the promise, has been held good as against the insured ; and, perhaps, after proper notice, against his assignee in bankruptcy.

This subject of assignment is frequently regulated by the by-laws of the insurers, or by the terms of the policy. Where it is not, we see no reason for saying that the right to know and choose the party assured does not apply, as in other kinds of insurance ; and consequently the insurers are

discharged if there be an assignment without their knowledge and consent. The cases, however, do not settle this question, and there opinions that life insurance is in this respect distinguished from other insurance.

OF WARRANTY, REPRESENTATION AND CONCEALMENT.

The general principles on this subject are the same which we have already stated in reference to other modes of insurance. In life policies, however, the questions which must be answered are so minute, and cover so much ground, that no difficulty often arises except in relation to the answers. One advisable precaution is for the answerer to discriminate carefully between what he knows and what he believes. If he says simply "yes" or "no," or gives an equivalent answer, this is in most cases a strict warranty, and avoids the policy if there be any material mistake in the reply. But where the answerer adds the words "to the best of my knowledge and belief," he warrants only the facts of his belief, or, in other words, nothing but his own entire honesty.

The cases which turn upon the answers to the questions are very numerous, but they necessarily rest upon the especial facts of each case and hardly permit that general rules should be drawn from them. Some, however, may be stated.

The first is, that perfect good faith should be observed. The want of it taints a policy at once, and the presence of it goes far to protect one. Thus, where the life-insured was beginning to be insane, but was wholly unconscious of it, the policy was not vitiated by the concealment, although two doctors in attendance upon him knew how the case stood.

There is a warranty, or statement, usually making a part of nearly all life policies; it is that the life-insured is in good health. But this does not mean perfect health, or freedom from all symptoms or seeds of disease. It means reasonably good health; and loose as this definition or rule may be, it would be difficult to give any other. And if a jury on the whole are satisfied that the constitution of one warranted to be "in good health" is radically impaired and the life made unusually precarious, there is a breach of the warranty, although no specific disease is shown which must have that effect. On the other hand, this warranty is not broken by the presence of a disease, if that be one which does not usually tend to shorten life (in one English case dyspepsia was said to be such a disease), unless it were organic, or had increased to that extreme degree as to be of itself dangerous.

Consumption is the disease which is most feared in this country as well as in England. And the questions which relate to the symptoms of it, as spitting of blood, cough and the like, are exceedingly minute. But here also there must be a reasonable construction of the answers. Thus, if spitting of blood be positively denied, there is no falsification in fact, though literally speaking the life-insured may have spit blood many times, as when a tooth was drawn, or from some accident. If there be an action on the policy, and the insurers rest their defence on any falsification of this kind, the question usually put to the jury is, Was the party affected by any of these or similar symptoms, in such wise that they indicated a disorder tending to shorten life? And any symptom of this kind, however alight—as a drop or two of blood having ever flowed from inflamed

or congested lungs—should be stated. In a case in Massachusetts, an applicant for life insurance answered an interrogatory whether he had ever been afflicted with a pulmonary disease in the negative, and in answer to an interrogatory whether he was then afflicted with any disease or disorder, and what, stated that he could not say whether he was afflicted with any disease or disorder, but that he was troubled with a general debility of the system; and it was proved that the applicant was then in a consumption, the symptoms of which had begun to develop themselves five months before and were known to him, but were not disclosed to the insurers, although sufficient to induce a reasonable belief on the part of the applicant that he had such a disease. It was held that, whether these statements amounted to a warranty or not, they were so materially untrue as to avoid the policy, although the insured, at the time of his application, did not believe that he had any pulmonary disease, and the statement made by him was not intentionally false, but, according to his belief, true.

The insurers always ask who is the physician of the life-insured, that they may make inquiries of him if they see fit. And this question must be answered fully and accurately. It is not enough to give the name of the usual attendant, but every physician really consulted should be named and every one consulted as a physician, although he is an irregular practitioner or quack.

If the warranty be that the life-insured is a person of sober and temperate habits, it has been held, in an action on such a policy, that the jury are not to inquire whether his habits of drinking are such as might injure his health; for if he has any "habits of drinking," this would discharge the insurers, because they have a perfect right to say that they will insure only those who are temperate. But it might be answered, that although the insurers have this right, and there may be good reasons why this should be the general practice, yet unless they use the word "abstinence," or something equivalent, they have no right to say that any one is not "temperate" who does not drink enough to affect his health; for certainly all "intemperance" does this.

NEW YORK CITY GOVERNMENT AND FINANCES.

The statement submitted to the Board of Supervisors by the Comptroller, giving the financial condition of the City of New York, and the aggregate taxation required for the maintenance of the Government, is well calculated to excite a lively apprehension, showing, as the figures do, a steady increase of expenditure, far disproportionate with that of wealth and population. The Comptroller, therefore, appeals to the Constitutional Convention now in session at Albany, to devise some more economical method of maintaining the city and county governments, and declares that there can be no just cause for such an increase of taxation. He also very properly urges the Board of Supervisors, and through them all Boards and Commissioners authorised to disburse the public moneys, to exercise the greatest prudence and economy in all expenditures with which they are charged.

The management of public affairs in the City of New York has long been a prolific theme for criticism and wordy declamation. This is no recent thing; for we remember that in 1849 the Democratic City Convention put forth an address in favor of Myndert Van Schaick for Mayor, in which censures were freely bestowed upon the administration of affairs, very similar to those which are current at the present time. The remedy then proposed and afterward applied was the revision of the charter of the city, by which the executive and administrative branches of the government shall be separated from the legislative, and devolved upon departments. The result proves that the experiment was not a successful one. The expenses were increased more rapidly than ever, as the following table will show :

Year.	Valuation.	Total tax.	Year.	Valuation.	Total tax.
1880.....	\$101,160,046	\$387,448 85	1881.....	820,110,857	2,994,425 94
1880.....	135,268,518	503,173 44	1882.....	851,708,426	3,890,511 90
1880.....	218,723,703	955,603 94	1883.....	413,681,332	5,086,898 74
1840.....	252,223,515	1,354,825 29	1884.....	462,021,734	4,845,826 07
1845.....	259,925,517	2,066,191 18	1885.....	486,998,378	5,643,823 89
1846.....	266,197,145	3,005,763 53	1886.....	511,740,491	7,075,425 73
1850.....	266,061,816	3,290,085 03			

A later mode of decreasing the expenditures has been by means of commissions appointed at Albany. Under this system in 1857 the Legislature enacted the Metropolitan Police Bill, which removed the police from the control of the municipal authorities, and devolved them upon a Board of Commissioners appointed by the Governor and Senate. This department of the government has been for many years growing into a costly body. The following table shows the increase under the last years of the two municipal systems and the first years of the metropolitans :

1861.....	\$492,000	1856.....	\$319,000
1852.....	510,000	1857.....	523,000
1853.....	540,000	1858.....	583,588
1854.....	615,000	1859.....	1,311,928
1855.....	573,000	1860.....	1,326,560

In 1860 the Legislature made another change by enacting that the Board of Supervisors should annually cause to be raised by tax the amount of money required from the city for the total expenses of the police district, since which time the police items do not appear in the tax levies enacted annually at Albany. The amounts since appropriated by the Board of Supervisors have been as follows :

1862.....	\$1,683,650	1865.....	\$2,311,556
1863.....	1,743,920	1866.....	2,166,684
1864.....	2,043,730	1867.....	2,531,347

These figures certainly do not indicate that the change of systems worked any decrease in the expenses of the police.

The statistics of the Governors of the Alms House show also a similar tendency to increase, as may be seen in the following table :

1850.....	\$400,000	1856.....	\$613,450
1851.....	380,000	1857.....	923,000
1852.....	390,000	1858.....	843,800
1854.....	365,000	1859.....	608,000
1855.....	437,000	1860.....	780,250

On the last night of the session of 1866 the Legislature abolished this

Board and created the Department of Public Charities. In 1865 their expenditures amounted to \$988,450. They have not materially increased.

The public schools also constitute an item continually on the increase. The following is a table of the expenses from 1850 to 1859:

1850.....	\$357,968	1855.....	\$328,409
1851.....	447,487	1856.....	1,022,254
1852.....	502,315	1857.....	1,100,410
1853.....	604,000	1858.....	1,328,012
1854.....	668,814	1859.....	1,216,800

In 1865 the amount appropriated was \$2,298,508 58; and several hundred thousand dollars have been since added. The Comptroller states it at \$2,939,348. The other Boards and Departments have a similar record to show. These figures indicate the tendency of matters both before the adoption of the expedient of governing by commissioners, and the tendency since that time, to have been the running year by year into prodigality and extravagant expenditure. In fact, this large increase would appear to have taken its rise on the first division of the Government into irresponsible departments. We have given above the total yearly aggregate and taxation from 1825 to 1856; we now add the figures for each year since the passage of the Metropolitan Police Act:

Year.	Valuation.	Aggregate tax	Year.	Valuation.	Aggregate tax
1857.....	\$521,175,254	\$2,111,766 09	1863.....	\$671,987,845	\$4,906,271 10
1858.....	531,194,220	2,631,091 31	1864.....	694,190,813	12,091,705 14
1859.....	551,923,123	2,800,926 09	1865.....	634,615,840	12,705,092 66
1860.....	577,280,856	2,752,507 88	1866.....	606,784,253	12,302,557 56
1861.....	581,679,971	11,637,623 28	1867.....	737,969,208	16,980,707 58

The amount of revenue required for 1867 is put down by the Comptroller at \$21,889,655 98. The Board of Supervisors will somewhat modify this aggregation, but the rate of taxation cannot vary greatly from three per cent.

How these rapidly increasing expenses can be stopped is of course a vital question. Much is expected from the deliberations of the Constitutional Convention, and we trust that their first effort in the way of solving the problem will be to give us a homogenous efficient municipal government. With this change, it strikes us that many of the difficulties in the way of initiating reform would be removed. The plurality of the functions, and the division of them into departments virtually independent of each other, totally overthrows responsibility, and tolerates the introduction of abuses which are hard to redress. A complete deliverance from this incongruous medley of state, county and city departments is then of the first importance. Many other changes have been proposed. The most important perhaps is that suggested by, we believe, the Citizens' Association, to the effect that one branch of the Common Council be composed of members elected only by taxpayers, and that body to originate all bills for the appropriation of money. This would certainly give promise of a more responsible body of men than our present city fathers, and has, besides, much else to recommend it. But, as the first and most important change, we desire an efficient, responsible government in the place of the many-headed makeshift we are now afflicted with. When that change is accomplished we shall be ready to look further.

PROJECTED RAILROAD FROM OSWEGO TO NIAGARA RIVER.

The Board of Trade of Oswego some time since appointed Messrs. E. Talcott, Charles Rhodes, A. P. Grant and John McNair a committee to examine the subject of a Lake Shore road between Oswego and Niagara river and to report to the Board the result of such investigation. As a connecting link in the communication between the West and the cities of New York, Boston and Portland upon the Atlantic seaboard this question has become one of great importance to the whole country. At a meeting of the Board of Trade, July 15, Hon. Cheney Ames in the chair, the following report of the committee was made, read and accepted :

REPORT.

The projected railroad from Oswego to the Niagara river has heretofore been the subject of much and careful consideration, not by those locally interested in its success, but by both eastern and western gentlemen of very great intelligence and practical experience in railroad and commercial matters, and its importance has been uniformly conceded as affording a much needed additional avenue for the transit of western trade. The volume of this trade is constantly and rapidly increasing, and with the steady growth of the western States in wealth and productive population and the completion of the Pacific railway, now progressing with astonishing rapidity, its prospective increase is beyond the reach of present computation. At an early day, and in the judgment of your committee at a day as early as the completion of the Pacific railway, with which the proposed Lake Ontario Shore road will be brought into direct communication, the latter will cease to be regarded as a competitor of existing railway lines; but the strife will rather be a combined one on the part of the several lines leading to the eastern seaboard, to furnish the required facilities for transportation between the East and the West. Hitherto the principal objection to building this road has been the want of suitable railroad connections from Oswego eastward to tide water. The two roads from Oswego to Syracuse and to Rome both connect at those points with the New York Central alone, and as that road has imposed upon freight to and from Oswego extra rates, as way freight, sometimes making the cost of transportation by railroad from New York to Oswego as great as to Buffalo—135 miles further west—a movement in favor of a road from the Niagara river to Oswego has involved the necessity of providing at the same time for a line hence to the Hudson, independent of the New York Central. This difficulty, so far as trade with New York city is concerned, now no longer exists. By a contract recently perfected between the Oswego and Syracuse, the Syracuse and Binghamton, and the New York and Erie roads (and which is to continue in force as long as the charters of those roads or any renewals of them shall survive), the former road is to make its gauge, by a third rail, the same as the other two; the two former to connect at Syracuse by a tunnel under the Central, and the New York and Erie is to transport through freight from Binghamton to New York at the same rates per mile which it shall at the time charge on through freight from its western termini at Buffalo or Dunkirk to New York. The work under this contract is now in active.

progress and the whole is to be completed and the arrangement go into full operation the coming fall.

This important and harmonious combination of interests which have hitherto, to some extent, been conflicting will restore the city of Oswego to her true geographical position—that of the nearest point on the great lakes to tide water—and open to the large commerce from Canada and the western States, already centered at Oswego, as well as its future increase, a reliable outlet by rail to New York and Philadelphia at current railroad rates.

The Atlantic ports, besides New York, are preparing to make a vigorous struggle for a participation in the western trade, which has been well styled the great commercial prize of this continent.

The State of Massachusetts, in order to lower the grade and shorten the distance between the Hudson and its chief commercial city, is perforating the Hoosic mountains by a tunnel, second in extent only to that now being cut through Mount Cenis, in Italy, and likely to equal that work in cost. That State, however, appears to be undaunted by the growing estimates of the cost of her great work, as it progresses, and will expend on this $4\frac{1}{2}$ miles of tunnel a sum sufficient to construct at least three such roads as the one proposed from Oswego to the Niagara, and her controlling motive is, through that tunnel, to seize upon and draw to Boston a portion of the trade of the west, the shortest and most feasible route for which will then be over the road now under discussion.

The city of Portland, also, in view of her excellent commercial position and unequalled harbor, demands her share of the western trade, and is moving actively to secure it. There is now in operation a connected chain of railroads from Oswego direct to Montpelier, Vermont. A committee, composed of prominent gentlemen of high character and representing large railroad and commercial interests in northern New England, recently visited Oswego for the purpose of securing a connected railway line from Portland to Oswego, and hence by the most direct feasible route to Chicago. After a consultation with your Board of Trade and other citizens, those gentlemen assured you that a road should be speedily built from Portland to Montpelier, thus furnishing a connected line from Portland to Oswego; and they ask of us and the Lake Ontario shore country, that by the proposed road to the Niagara we supply the only link wanting between Portland and Chicago.

The completion of the Southern Central road will add another important connection to a Lake Shore road. This road, which starts from Fairhaven, at the head of Little Sodus bay, on Lake Ontario, fourteen miles west of Oswego, will extend southerly along a remarkable easy grade to the Pennsylvania State line, and then connect with roads running into the coal fields and oil regions of that State and to Philadelphia. This road is already graded nearly its whole length, and it is now under contract for completion ready for use in the fall of 1868. The proposed road would cross the Southern Central at or near Fairhaven, and the two roads be obviously of great mutual benefit.

The Eastern and Southern lines of road to which we have referred will all find their most desirable and direct connections for the west with the projected road at or near Oswego, and with the advantages afforded by these connections, none of which have ever before been presented, an entirely new aspect is given to the proposed enterprise.

At the western extremity of the State not only are the same connections open to this road which are now enjoyed by the Central, to aid the lake shore roads and the lake steamers at Buffalo and the Great Western railroad at Suspension Bridge, but a connection with the Great Western or with a new and more direct line across the peninsula south of the Great Western at Lewiston, would be preferable to either of the others or to all of them combined.

By crossing the Niagara at Lewiston, there will be a very considerable saving, both in distance and grade, as this route presents the shortest line to Detroit and Sarnia, and also avoids an ascent of about 330 feet from the level of Lewiston to Suspension Bridge, and an equal descent on the west side of the river before reaching St. Catherines and Hamilton, between which last city and Detroit the elevation of Lake Erie above lake Ontario is overcome by well distributed grades.

THE ROUTE FROM LEWISTON TO OSWEGO.

From Lewiston to Oswego, a line by way of Rochester has been surveyed by competent engineers, and in respect to grade, cheapness of construction, beauty of natural scenery, and the productiveness of the country, it is for an equal length of rail, without a parallel in the State. The grade is generally level or descending gently to the East, and nowhere on the whole line, after leaving Lewiston, does it exceed twenty-six feet to the mile. The distance from Lewiston to Oswego is 141 miles. From Lewiston to Rochester the survey was made in 1857, by Messrs. Parkinson & Smith, C. E., whose maps, profiles, estimates and report are now in the possession of your Board of Trade.

In their report of this survey these gentlemen make the following statement:

"We may safely say that never have we, in all our engineering experience during the past twelve years, and in almost all parts of the United States, found a district of country seventy-three miles in length that presents so many favorable features for the construction of a first-class railroad. In the opinion of the most eminent geologists, the country through which our line passes, on the north of the ridge, is the shelving beach of an ancient lake, of which the ridge itself was the margin, and our line, running very nearly in the direction of the water line, could not of course be very undulating. The country is so remarkably uniform and level that no grade occurs on the entire route, after leaving Lewiston, over 26 feet per mile. There are $16\frac{1}{4}$ miles of grades under five feet per mile, and nearly 17 miles of the lines are level. Summing, we find that there are sixty-eight and one-fourth miles out of 73 2-10 miles—the entire length of the line, with grades under 20 feet per mile. Your road compares very favorably with the New York Central, not only in point of grades and alignment, but possesses an advantage in distance not unworthy of notice. The soil of the entire district passed over is of most excellent quality, and the division of the country into so many small farms causes it to resemble a continuous village.

"This estimate of cost for a single track, with station houses, depots, fencing and rolling stocks, with a rail weighing 70 pounds to the yard, exclusive of the cost of right of way is, \$15,550 per mile" (made on prices of labor and materials in 1857).

From Rochester to Oswego the survey was made in 1865, by Mr. John McNair, C. E. The distance between the places is 69 48-100 miles, for about one half of which the line runs along the same "shelving beach" as before described, and presenting the same features in soil, grade, and evenness of surface. From this point to Oswego, Mr. McNair made his survey with great care, and states that the grade will nowhere on this line, exceed the maximum west of Rochester, of 26 feet to the mile. These surveys from Lewiston to Oswego, present a line in the highest degree inviting as a railroad route and it would certainly seem most, surprising that such a line, offering such unusual advantages in the way of local business, and cheapness of construction and connecting directly with roads running to Chicago and the far West, should have so long remained unoccupied—were it not for the want heretofore felt of proper outlets, eastward from Oswego to the seaboard. But with the entire removal of this difficulty by the completion of the three several connecting lines of railway to the East and South, before referred to, all of which must become outlets and feeders for the road in question, the undersigned do not hesitate to express their conviction that no line for a railroad of equal length can be found in this country having as many marked advantages, and promising so large a return upon the capital required for its construction, as the one from Oswego to the Niagara River. It will form part of a route from Detroit to New York city, for both freight and travel, at least equal to any other, and so far as all of Northern New York and New England are concerned, a route with which no other can successfully compete.

In estimating the future demands of trade upon the means of transportation, we may accept the fact as already demonstrated by the history of the internal commerce of the country during the last fifteen years that railroads are to do the great bulk of the carrying trade.

Among the great canals of this country constructed for the transportation of produce, the Erie canal is the only one which has not already proved a failure. Pennsylvania has sold her great canal to a railroad company. Ohio has tried without success to sell hers, and the Wabash canal of Indiana is wholly without value to the State, more than one-half of it being left without repair and utterly useless for commerce. The railroads have virtually superseded them all. Even our Erie canal has its lesson in the same direction, though strenuous efforts have been made to retain its trade by reducing tolls, and increasing its capacity for large size boats.

In 1880 the tolls on the Erie canal between Albany and Buffalo were, on up freights \$10 22 per ton and on down freights \$5 11. In 1858 they had been reduced to \$1 46 per ton each way, and they have for many years been adjusted on many articles with a view to meeting railroad competition. In 1880 the capacity of the largest boats on the canal was 70 tons. Since the enlargement their capacity is increased to 224 tons. In 1863 Erie canal tolls were removed from our railroads, and until that time they were comparatively but little used in this State for freight. In that year the freight carried on the New York Central was 360,000 tons, and on the New York and Erie 631,039 tons, total 991,039 tons. Freight carried by the Erie canal the same year, 4,247,853 tons. In 1859 the freight carried on the Erie canal was 3,781,684 tons, while the two railroads above named carried 1,703,391 tons. In 1866 the deliveries of

freight by canal at tide water was 1,107,537 tons. The total freight carried on all the State canals in that year was 5,775,220 tons; while that carried on the railroads of the State was 9,210,476 tons. The revolution indicated by these statements, and which has been wrought in the last 13 years in the use of railroads for freight, speaks unmistakably for the future. The tendency of trade has been and is towards greater rapidity in its transit between the western and eastern markets. The telegraph in a few moments of time announces to the western merchant the state of the eastern markets both at home and in Europe. Short commercial papers required by banks and the commercial requirement for trade now is celerity of movement with the lowest attainable point in cost. In view of the facts and suggestions which we have presented, your committee are of the opinion that the proposed railroad from Oswego to the Niagara river should be built, and we recommend an early organization of a company for that purpose and vigorous prosecution of the work to a speedy completion.

NORTH CHINA TRADE.*

At present the northern ports are supplied with goods from Shanghai and Hongkong, where the native dealers go and purchase the greater part of the manufactures that are sold in these markets; and until the ports of Chefoo and Tientsin are brought into direct communication with the British manufacturer, and goods are sent out from England direct to them, these ports can hardly be said to be opened to British commerce, nor will British trade in these ports and the whole north of China be satisfactorily developed. The laying down price of goods at the northern ports, if received direct from England, would be necessarily less than what goods bought at Shanghai, with the addition of freight, insurance, etc., now cost at Chefoo and Tientsin before they can be offered to native dealers; and the difference in cost in favor of the direct shipments would materially increase the consumption of British manufactures if they took place.

The trade of Tientsin is now so linked with that of Chefoo that the one cannot be considered separate from the other in this point of direct trade with England, and ships coming out might bring cargoes for both places, as they are only separated by a sea journey of twenty-four hours. Of the three treaty ports in the Gulf of Pecheli, the one best adapted for direct trade with England would certainly be Chefoo. It is the only one of the three ports which is not closed by ice during the winter. The navigation is easy; the anchorage is safe at all seasons of the year; and it is already a large central market for the Gulf trade, and even now is a distributing depot for the whole of the North of China.

It is very difficult to state what will be the probable future capability of Chefoo and the North of China in regard to British manufactures. The statistics of the last five years offer no criterion for a decisive judgment in this matter.

The lamented civil war in the United States of America, by reducing

* Extracts from a report on the North China Trade by one of the British Consuls in that section.

the quantity of cotton available for England and the consequent advance in the price of goods, has kept the China trade in an abnormal state since 1862. Still there is sufficient in the records of the trade to warrant some deductions as to the future. In 1861, when cotton goods were less than two-thirds of their present cost, there were upwards of 1,000,000 pieces of English cotton goods purchased at the ports of Chefoo and Tientsin. In 1863, when cotton goods cost as much again as in 1861, the consumption was still over 1,000,000 pieces of goods at the two ports. In 1861 the peace of the north of China was endangered by rebels who ravaged all the province of Shangtung, and the consumption of that year can hardly be considered as an average; for in 1865, when the northern provinces were tranquil, the consumption was as large, although the goods cost 50 per cent more than before; and at Chefoo during that year (1865) the natives bought more than 250,000 pieces of cotton goods at these high rates, which shows that notwithstanding the shipments to other northern ports, Chefoo is gradually resuming its former importance. It should be borne in mind also that previously to 1862 the importation of raw cotton to the port of Chefoo was 50,000 bales a year and about 80,000 bales at Tientsin; whereas in 1864 there were 60,000 bales exported from Chefoo alone. The north of China, besides the 1,000,000 pieces of cotton goods that it consumed in 1861, purchased about 17,000,000 pounds of cotton or a quantity sufficient to make 2,000,000 pieces of cotton goods;—thus making in 1861, when the foreign trade had only begun and times were unfavorable, owing to rebels, a purchase by the north of China of cotton goods and cotton stuffs to the equivalent of 3,000,000 pieces of English cotton goods in one year. At the same time very large quantities of cotton cloths, woven at Shanghai and the Middle Provinces of the Empire, were imported to Chefoo and Tientsin to supply the wants of the natives, so that this must be added to the actual total consumption of cotton cloths in the north of China. Since then the northern Chinese have not only produced the cotton sufficient to clothe themselves, but for export in considerable quantities; but if the inducement of high prices ceases to excite the northern Chinese to produce cotton for export, they will again be purchasers of cotton and cotton goods to the extent already indicated. The vast capability of the north of China to purchase cotton goods may be gathered from the fact that the bulk of the natives are seldom seen wearing cloths made from English cottons. They appear to be clad in native woven materials, and as soon as British merchants can supply the north of China direct from England with goods at such a moderate cost as to be within reach of the masses of the people, the increase of consumption will probably be immense.

Even supposing that the bulk of the people should continue to prefer the native woven cloth, still when the prices are so low as not to excite its production, they will prefer importing it from Shanghai to at least the quantity used before the export began; and British trade could even then find a very great opening, hitherto untried, of offering to the northern Chinese weavers English spun cotton yarn to the extent of at least 15,000,000 pounds a year—that being the equivalent of the cotton yearly imported for spinning and weaving purposes. Indeed, could cotton yarn be again imported at former low prices from England direct to the north of China, the consumption of this article would form a larger trade than that of cotton goods.

During the last three years it has become impossible to draw the attention of natives to buying yarn, owing to its high price; but there is evidence to show that could it be offered to them at a moderate cost, they would prefer using it to their own unevenly spun webs. In the Province of Shantung, which is specially dependent on Chefoo for its trade, there are more than 10,000,000 pounds of cotton goods woven by the natives each year, and consequently the opening for a trade in yarn at this port is prodigious.

Although the trade in metals has not yet assumed any great importance, moderate quantities of English iron and lead have found their way to Chefoo. The consumption of lead up to the present time is about 800 tons a year, and it is chiefly used in making minium or red lead, with which the natives color the paper employed in ceremonies, and for special correspondence and for placards. About 600 tons of English iron are now imported a year to Chefoo. The native iron competes with it in price for certain sorts, but eventually, when iron is sent out direct from England, so as to lay down here at cheaper rates than what it now costs to bring it from Hong Kong and Shanghai, after it has been shipped to those ports from England, there will doubtless be much larger consumption of every description. There is a large trade for needles and it is on the increase. This branch of trade is supplied from Germany. The growing taste for all European articles of utility is extending itself to other articles of hardware which might be developed if a direct trade with England took place.

There is not much request for woollen cloths, though moderate sales of cotton and woollen mixtures are made here. The use of wadded clothing and sheep skins for woollen garments, which are thus cheaply obtained, will always be a bar to a large consumption of English woollen goods. Russian woollen cloths are in limited use, and the cheap German light woollen fabrics find some favor with the better classes as medium clothing in the spring and autumn.

English coals have been in good demand since the extension of steamer trade to the north of China, and during the year 1865 the consumption exceeded 2,000 tons. As Chefoo is the coaling station for nearly all the mercantile steamers going to Tientsin and Newchwang, and as the English and French navies have coal depots in this port for the use of vessels of war, this branch of trade would greatly increase if coals were sent out direct from England. At present the cost is high, owing to the great expense incurred in transshipping the coal from Shanghai, whence the principal supply comes. It would be an advantage to the British Government if the Royal Navy steamers could get coal here direct from home. There is good coal to be had in Shantung, in which province Chefoo is situated. A sample of this coal was submitted to Admiral Hope in 1862, and the officers appointed to test it reported favorably on its serviceable quality for steamers. How far the coal mines are from Chefoo has not been ascertained. The mineral resources of Shantung are reported to be large. There are sulphur and mineral springs about thirty miles distant from this port, renowned for their healing qualities, and if a proper geological survey were made of the country much might be discovered that would add to the commerce of Chefoo.

Amongst the articles that can be exported from Chefoo there is brown

silk, produced from the wild silkworms that swarm in the mountain forests; and the quantity of this article that could be brought into the market if prices suited may be computed at not less than 12,000 bales a year. This silk is of different qualities, according to the process and care adopted in reeling it from the cocoons, and some of it is well adapted for manufactures. The natives weave plain silk goods from it, called pongees, and about 100,000 pieces of these stuffs could be bought annually. There is also a considerable quantity of fine yellow silk produced in the province. In 1861 and 1862 nearly 1,000 bales were exported, but since then very little has been offered for sale. The cause of this silk not making its appearance at Chefoo is partly owing to its being worked up by the native looms to supply the local demand for silk piece goods. Formerly the greatest portion of silk goods used in the north was brought from Foochow and other southern manufacturing towns; but since the rebels devastated those countries this has ceased to be the case, though at present Chefoo imports a moderate quantity of Chinese woven silks, as well as many other branches of commerce. The value of these silk goods imported in the year 1865 was about £45,000 sterling. The silk trade of Chefoo will only be developed and rightly ascertained when by direct importations of English manufactures it will attract to itself all the produce that the natives have to exchange for European commodities.

The capability of Chefoo and the neighboring port of Tientsin for shipping cotton direct from England seems most strangely to have been overlooked or neglected. During the whole of the years 1863 and 1864 more than 20,000,000 pounds of cotton were shipped away from the two ports for Shanghai and Hong Kong, the greater part of which was thence transhipped to England. If the cotton had been shipped either at Chefoo or at Taku (the seaport of Tientsin), the extra cost of freight, the expense of transhipment, of fire and marine insurance, and other incidental charges, as well as a difference in price, in all amounting to at least 2d. a pound, would all have been saved and a great impulse to British trade in the north of China would have been the result. In case of cotton being again required from the far East for the Lancashire looms, Chefoo and Tientsin are likely to export large quantities direct to England.

Besides these matters, which directly interest British commerce, Chefoo has commercial relations with Japan, where there is a large market for the medicinal roots and herbs of the north of China, and whence the supplies of isinglass and earthenware are received in return.

A trade in seaweed and peas is also springing up with the Russian ports to the north of the Corea, and the former article is distributed all over the north of China, from Chefoo. There is every probability of a large increase in this business, and that Chefoo will become the centre of the northern trade with those countries and with the Corea, since the trade has already fallen into this channel.

RAILROAD EARNINGS FOR JUNE AND SECOND QUARTER.

The gross earnings for the under specified railroads for the month of June, 1866 and 1867, and the difference (increase or decrease) between the two periods, are exhibited in the subjoined statement:

Railroads.	1866.	1867.	Increase.	Decrease.
Atlantic and Great Western.....	\$474,441	\$380,796	....	\$94,645
Chicago and Alton.....	871,548	848,671	....	22,877
Chicago and Great Eastern.....	118,788	87,788	....	31,000
Chicago and Northwestern.....	922,891	898,857	....	24,434
Chicago, Rock Island and Pacific.....	350,920	261,480	....	89,440
Cleveland and Toledo.....		(Not received in time.)		
Erie.....	1,342,686	1,118,781	....	224,905
Illinois Central.....	567,679	498,616	....	68,063
Marietta and Cincinnati.....	106,815	96,585	....	10,230
Michigan Central.....	335,089	244,977	....	90,112
Michigan Southern.....	392,640	304,239	....	88,401
Milwaukee and Prairie du Chien.....	262,172	114,579	....	147,593
Milwaukee and St. Paul.....	244,876	221,190	....	23,686
Ohio and Mississippi.....	253,924	240,185	....	13,739
Pittsburg, Fort Wayne and Chicago.....	658,667	5,658	....	127,081
Toledo, Wabash and Western.....	225,69	304,810	....	20,881
Western Union.....	102,686	60,559	....	42,127
Total in June.....	\$6,706,446	\$5,731,537	\$.....	\$984,909
Total in May.....	6,613,070	6,068,325		544,745
Total in April.....	5,696,340	6,080,678	\$24,438	.....

The gross earnings per mile of road operated for the same month of the years, respectively, are shown in the following table:

Railroads.	Length in miles.		Earnings.		Difference.	
	1866.	1867.	1866.	1867.	Incr.	Dec.
Atlantic & Great Western.....	507	507	\$986	\$751	...	\$235
Chicago and Alton.....	380	380	1,827	1,287	...	540
Chicago and Great Eastern.....	234	234	494	314	...	180
Chicago and Northwestern.....	1,032	1,145	894	784	...	110
Chicago, Rock Island & Pacific.....	410	410	866	638	...	228
Cleveland and Toledo.....						
Erie.....	798	775	1,570	1,448	...	122
Illinois Central.....	708	708	809	701	...	108
Marietta and Cincinnati.....	251	251	423	384	...	39
Michigan Central.....	365	365	1,176	1,000	...	176
Michigan Southern.....	394	394	749	551	...	198
Milwaukee & Prairie du Chien.....	234	234	1,115	489	...	626
Milwaukee and St. Paul.....	275	275	881	806	...	75
Ohio and Mississippi.....	240	240	747	712	...	35
Pittsburg, Ft. Wayne and Chicago.....	468	468	1,254	1,031	...	223
Toledo, Wabash and Western.....	521	521	695	588	...	107
Western Union.....	177	177	580	342	...	238
Total in June.....	7,034	7,124	\$953	\$803	\$..	\$150
Total in May.....	7,307	7,297	917	824	...	93
Total in April.....	7,307	7,297	790	826	36	...

The results of railroad operations for June are given above, and from these it will be seen that all the roads from which reports have been received have decreased their earnings. In June, 1866, the earnings on 7,034 miles were \$6,706,446, and in June, 1867, on 7,124 miles, \$5,721,537, the aggregate decrease being \$984,909, or at the rate, as shown in the second table, of \$150 per mile of road operated. This is certainly very large. The decrease from the month of May last, however, is only \$31 per mile of road. The exhaustion of the old crops appears to be the scapegoat for this condition of railroad matters.

The results of the second quarter of the current year compared with

those of the corresponding quarter of 1866 are shown in the statement which follows:

Railroads.	—Gross earnings.—		—Earn's p. m.—			
	1866.	1867.	1866.	1867.	Inc.	Dec.
Atlantic and St. Western.....	\$1,230,451	\$1,233,195	\$2,604	\$2,631	..	72
Chicago and Alton.....	970,842	966,818	3,466	3,461	..	16
Chicago and Gt. Eastern.....	841,258	830,236	1,319	1,001	..	218
Chicago and Northwestern.....	2,375,944	2,406,744	2,305	2,102	..	102
Chic., Rock Island and Pacific.....	925,400	793,679	2,257	1,936	..	311
Eric.....	3,49,709	3,453,014	4,324	4,483	78	...
Illinois Central.....	1,548,584	1,394,220	2,187	1,970	..	217
Marietta and Cincinnati.....	284,701	259,899	1,184	1,035	..	99
Michigan Central.....	1,044,014	981,719	2,668	2,445	..	218
Michigan Southern.....	1,238,560	1,051,996	2,344	2,007	..	237
Milwaukee and P. du Chien.....	637,743	231,198	2,794	1,373	..	1,329
Milwaukee and St. Paul.....	611,607	644,736	2,323	2,199	..	34
Ohio and Mississippi.....	814,477	807,806	2,336	2,376	..	19
Pittsburg, Ft. Wayne and Chic.....	1,915,968	1,660,115	4,094	3,547	..	547
St. Louis, Alton and T. Haute.....	508,099	515,968	2,896	2,459	64	...
Toledo, Wabash and Western.....	913,494	950,940	1,751	1,839	78	...
Western Union.....	232,938	150,121	1,316	899	..	417
Total 2d quarter.....	19,122,876	17,844,466	2,639	2,473	..	207
Total 1st quarter.....	16,211,758	16,071,818	2,941	2,193	..	48

The total length of the above railroads having been in 1866 7,244, and in 1867 7,334 miles.

With regard to the quarterly summary, the result is a decrease in earnings, as compared with the 2d quarter of 1866, to the extent of \$207 per mile of road operated, and since January 1 the decrease has been \$250 per mile. This is about 5 per cent. on the aggregate.

These results are better than were anticipated, and the loss has probably been balanced by reduced expenditures. If this has been the case, the net earnings will not be injured, while the coming half year is full of promise and may, from increased business, fully make up the gross totals of the railroad year 1866.

DEBT OF NEW JERSEY.

We have lately received the published reports of New Jersey for the past year. From them it appears that the debt of the State at the close of the fiscal year, November 30, 1866, amounted to the sum of \$3,395,200, evidenced by certain bonds authorized by law, as follows:

By act of May 10, 1861, the Governor and Treasurer, for war purposes, were directed to borrow, on the issue of 6 per cent. bonds (exempt from taxation), none of which were to be made payable at a later date than January 1, 1885, not exceeding \$2,000,000. Under this act the following issues were made and were outstanding at the date mentioned:

Due Jan. 1.	Amount.	Due Jan. 1.	Amount.	Due Jan. 1.	Amount.
1867.....	\$99,600	1873.....	\$100,000	1879.....	\$100,000
1868.....	99,600	1874.....	100,000	1880.....	100,000
1869.....	99,900	1875.....	100,000	1881.....	100,000
1870.....	100,000	1876.....	100,000	1882.....	100,000
1871.....	100,00	1877.....	100,000	1883.....	100,000
1872.....	99,900	1878.....	100,000	1884.....	100,000

—total outstanding \$1,798,900.

By a supplementary act, approved March 24, 1863, the same officials were authorized to borrow, for like purposes, on similar bonds, none of which were to be made payable later than January 1, 1896, an amount

not exceeding \$1,000,000. The issues under this act outstanding at date are payable as follows:

Due Jan. 1.	Amount.	Due Jan. 1.	Amount.	Due Jan. 1.	Amount.
1886	\$100,000	1890	\$100,000	1894	\$100,000
1887	100,000	1891	100,000	1895	77,000
1888	100,000	1892	62,600	1896	67,000
1890	100,000	1893	96,800		

—total outstanding \$1,002,900.

By a further act approved April 14, 1864, the same officials were authorized to borrow for like purposes such sums of money which, with the moneys borrowed under preceding acts, should not exceed \$4,000,000, and to issue bonds therefor at 6 per cent., none of which should have a longer time to run than to January 1, 1902. This issue of bonds, however, was not exempted from taxation, and none of them were sold prior to the passage of an act approved April 4, 1866. This latter act stated in its preamble that \$4,000,000 had been heretofore appropriated for paying the expenses incident to the suppression of the rebellion; but that not more than \$3,000,000 had been borrowed, leaving authority to borrow \$1,000,000 more; and since the State was indebted more than \$600,000 for expenses incident to said suppression, this act provided that the Governor and Treasurer might borrow the sum of \$1,000,000. The outstanding issues under these two laws at the close of the fiscal year were as follows:

Due Jan. 1.	Amount.	Due Jan. 1.	Amount.
1897	\$199,400	1899	\$123,000
1898	200,000	1902	71,000

—total outstanding \$593,400.

Thus of the \$4,000,000 authorized only \$3,395,200 have been issued. The first law passed upon this subject (that of 1861), provided that not more than \$100,000 thereof of principal money, should be made payable in any one year. The same provision was found in the supplementary act of 1863, except that in the latter it is enacted that no part of the principal should be paid before 1886, and the further supplement of 1864 declares that not more than \$200,000 of the principal authorized by its provisions should be made payable in any one year, and no part thereof before 1897. It follows therefore that these bonds, which compose the evidences of the State debt, are payable in instalments, and at different times between the year 1865 and the year 1902. The payment of interest and principal as they become due is made the duty of the Commissioners of the Sinking Fund from the moneys of the Fund furnished them by the Treasurer, whose duty it is to pay over to them all moneys raised by law, and received by him for the purpose of liquidating the principal and interest of this bond debt. The three first instalments of the principal (those of Jan. 1, 1865-66 and '67) have been already paid from the Sinking Fund, the chief resource of which is the proceeds of a general tax of \$280,000 a year on the property within the State.

The population of New Jersey, by the census taken in 1865, was 773,700, being an increase in five years of 101,671, the population in 1860 having been 672,029. Taking the debt as it stood on the 30th November, 1866, at \$3,395,200, the distributive share to each inhabitant appears to be about \$4.39 *per capita*.

By an act approved March 21, 1866, the counties, cities, towns, townships and other municipal corporations of the State were directed to prepare and forward to the Comptroller a succinct statement, properly certified, of all moneys expended by them for the purposes of the late war. Circulars were, in accordance with this act, transmitted under date of March 30, 1866, to all such corporations, requesting returns on the subject before May 1. With few exceptions the required reports were made, and, excluding those not reporting, the aggregate amount of bounties paid, or indebtedness incurred on account thereof, was found to be \$23,447,988 77, as follows:

Counties.	Population.	Amount.	Per capita.
Atlantic.....	11,844	\$125,168 00	11.02
Bergen.....	24,636	146,661 81	59.42
Burlington.....	50,719	1,437,968 94	28.29
Camden.....	38,464	802,439 46	20.86
Cape May.....	7,635	162,931 33	21.37
Cumberland.....	26,228	650,755 78	24.81
Essex.....	124,441	3,749,268 50	30.13
Gloucester.....	20,184	608,990 00	30.11
Hudson.....	87,519	3,401,468 11	38.73
Hunterdon.....	40,758	1,099,791 63	26.96
Mercer.....	41,478	1,658,863 04	39.99
Middlesex.....	85,916	1,403,808 53	32.06
Monmouth.....	42,868	1,067,296 86	24.89
Morris.....	36,512	642,176 36	17.56
Ocean.....	14,263	167,533 50	11.74
Passaic.....	34,656	894,198 69	25.71
Salem.....	23,163	578,988 25	24.94
Somerset.....	21,610	781,738 00	36.17
Sussex.....	23,929	644,915 80	26.95
Union.....	35,410	1,351,945 68	38.22
Warren.....	31,523	753,880 16	23.89
Total.....	773,700	\$23,447,988 77	\$30.31

This total represents the moneys absolutely contributed by the towns, counties, &c., for the purposes of war, which added to the State debt, \$3,395,200, shows the entire contributions of New Jersey for the purposes mentioned. This is \$34 70 per capita, varying in each locality; or reckoning five persons to a family, as the average, would make 173.50 to each head of a family. The interest on this amount at 6 per cent. is \$1,610,591.33 a year, or \$2.08 per capita. By an additional dollar per head annually, successively placed at compound interest as a sinking fund, the principal amount may be liquidated in thirty-four years.

The total valuation of the State is \$467,918,324. The State debt in relation to this valuation, is as \$0.72 to every \$100 and the local debt as \$5.01 to every \$100, or together \$5.73 to every \$100. This is by no means burdensome to a wealthy and industrious people.

CLEVELAND, COLUMBUS AND CINCINNATI RAILROAD.

The Cleveland, Columbus and Cincinnati Railroad forms, in connection with the Little Miami and Columbus and Xenia Railroads, the direct line between Cleveland on Lake Erie and Cincinnati on the Ohio, a distance of 255 miles. At Cleveland it connects with the Lake Shore line to Buffalo, and through that with the New York Central, which together form the great through line from New York to Cincinnati. The Bellefontaine Line leaves the road at Galion, 80 miles distant from Cleveland, and the

Columbus and Indianapolis Railroad leaves it at Columbus, both extending westward *via* Indianapolis, in the direction of St. Louis; and in its course it is crossed by the Sandusky, Mansfield and Newark Railroad (at Shelby), and by the Pittsburg, Fort Wayne and Chicago Railroad (at Crest-line). At Delaware it gives off the Springfield Branch which connecting with the Little Miami forms a second route to Cincinnati.

The Cleveland Columbus and Cincinnati Railroad Company were incorporated in 1846; and the road, commenced in 1848 and opened by sections, was completed in February, 1851. The curves at Delaware connecting the line with the Springfield, Mount Vernon and Pittsburg Railroad (now the Springfield Branch) were constructed in 1853. This branch was purchased by the Company in January, 1861:

The constituents of the railroad as at present existing are as follows:

Main Line, Cleveland to Columbus	121.29 miles.
Delaware Curves, at Delaware	5.77 "
Springfield Branch, Delaware to Springfield	49.60 "

—making a total of 190.96 miles. The length of second track (all on the main line) is 55.8 miles, and there are also about 35 miles of sidings.

In the following statement is contained a review of the operations of the company for the six years ending December 31, 1866, and its financial condition at the close of each annual period.

The amount of rolling stock in use in the stated years was as follows:

	1861.	1862.	1863.	1864.	1865.	1866.
Locomotives	43	40	47	41	44	45
Passenger Cars	81	83	86	97	98	94
Mail and baggage cars	8	9	9	9	10	10
Freight cars, house	385	394	511	458	473	458
" " stock	113	133	107	121	121	109
" " platform	61	109	169	184	179	160

The miles run by locomotives with trains in each year, are stated in the following summary:

	1861.	1862.	1863.	1864.	1865.	1866.
Passenger service	231,459	264,298	290,071	310,731	318,753	351,787
Freight service	847,057	473,261	491,333	445,745	405,373	453,683
Fuel service	24,470	25,399	40,140	35,616	47,022	50,908
Repair service	20,489	41,965	48,994	76,049	34,358	18,833
Switching service	53,655	114,305	151,703	164,227	161,414	176,891
Total	707,100	926,628	1,012,130	1,033,868	1,967,830	1,055,592

The number of passengers and tons of freight carried, and the mileage thereof, is shown in the following statement:

	1861.	1862.	1863.	1864.	1865.	1866.
Passengers carried	190,490	260,064	293,810	532,142	559,381	398,051
Miles (1,000ds) travelled	737,413	1,133,303	1,344,061	1,394,663	1,120,453	1,073,525
Tonnage carried	416,756	571,097	607,063	562,758	459,708	517,199
Miles (1,000ds) of carriage	39,455	67,063	53,358	52,779	43,288	46,153

The earnings and expenses yearly for the same years, and the distribution of the profits from operations, were as follows:

	1861.	1862.	1863.	1864.	1865.	1866.
Passengers	\$270,019	\$444,945	\$517,553	\$504,434	\$574,220	\$623,230
Freight	737,413	1,133,303	1,344,061	1,394,663	1,120,453	1,073,525
Express	22,944	25,119	35,364	37,964	55,276	43,009
Mails	39,100	31,154	31,343	31,343	31,248	31,343
Rents	84,137	83,363	84,096	84,508	81,537	73,715
Berea Branch				2,237	2,533	7,759
Mileage of cars	14,868		12,114	7,210	10,973	10,804
L. M. & C. & X. RR Co's.					37,740	16,587
Other sources		473	1,049	6,553	3,604	2,677
Dividends and Interest	5,753	7,609	112,834	46,184	67,905	45,370

Total earnings.....\$1,363,363 1,734,017 2,151,943 2,499,348 2,336,183 1,933,700

From which must be deducted operating expenses, as follows:

Transportation.....	\$200,845	\$251,330	\$208,056	\$402,374	\$423,779	\$425,911
General expenses.....	19,541	20,394	24,999	34,397	37,634	37,045
Repairs of track.....	123,181	126,945	223,098	373,493	491,337	349,110
Repairs engines.....	41,173	57,546	70,924	90,123	122,178	104,880
" cars.....	42,888	39,194	55,184	89,631	109,808	79,901
" build'gs.....	24,036	21,778	13,718	24,423	34,224	20,224
" bridges.....			5,961	8,031	24,522	17,945
" fences.....			8,929	3,009	8,929	12,453
Fuel.....	50,048	66,384	109,835	146,600	187,064	147,453
Damages & gratuities.....	7,547	9,516	14,354	56,703	23,944	21,043
Oil and waste.....	6,165	8,636	12,066	17,931	19,638	21,296
Use of cars.....		1,581				
Telegraph expenses.....	5,123	2,868	3,459	4,906	7,394	6,764
Operating expenses.....	\$533,005	\$634,170	\$698,703	\$1,264,183	\$1,550,623	\$1,264,017
Profits from operations.....	\$728,248	\$1,090,747	\$1,308,240	\$1,235,163	\$535,510	\$679,633

These profits were disposed of on the following accounts:

Taxes, State and national.....	\$23,431	\$24,245	\$26,963	\$166,043	\$172,305	\$157,577
Roads & depots.....				167,875		
Interest balances.....	23,351	23,355			26,507	20,300
Dividends on stock.....	474,631	974,050	549,667	699,304	599,635	479,743
Old accounts settled.....		22,017				
Surplus to cr. dit.....	207,246	37,570	666,560	2,040	37,063	42,153

The amount of materials used in track repairs in each year was as follows:

	1861.	1862.	1863.	1864.	1865.	1866.
New iron rails.....tons.	600	250	451	....	800	164
New steel rails.....	....	....	....	....	27	....
Re-rolled rails.....	2,707	2,591	2,751	3,294	4,438	4,091
Rails repaired.....number.	15,803	14,173	13,838	14,681	1,151	2,086
New cross-ties.....	65,000	67,943	91,843	112,037	83,603	83,377
Joint chairs.....	10,000	1,577	4,687	8,966	159,757	12,530
Iron joint spike.....	6,000	9,400	218,933	379,044	373,924	230,705
Joint bolts & nuts.....	....	....	235	443	109,120	104,915
Spikes.....	596	679	514	1,163	211,340	174,630

The financial condition of the company at the close of each year, as appears on the general Balance Sheet, is summed up in the following statement of liabilities and profits:

	1861.	1862.	1863.	1864.	1865.	1866.
Capital stock.....	\$4,746,300	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
Funded debt.....	510,000	510,000	510,000	491,500	475,000	450,000
Bills payable.....			150,000			
Divid's payable.....	237,310	499,430	340,886	419,692	399,635	229,633
Balance due on accounts.....	7,023	804	9,587	2,107	28,235	
Surplus.....	416,836	444,396	313,081	6,136	43,300	81,355
Total liabilities.....	\$5,917,359	\$6,454,130	\$7,323,513	\$6,912,435	\$6,843,360	\$6,771,346

Against which are charged as follows, viz.:

	\$	\$	\$	\$	\$	\$
Road and Depots.....	4,030,737	4,230,777	4,394,788	4,000,000	4,000,000	4,070,000
Equipment.....	637,216	723,116	836,283	750,000	750,000	790,000
Stocks and bonds.....	539,636	674,007	1,632,633	1,137,750	1,137,750	1,132,750
Materials on hand.....	120,891	134,789	231,501	286,973	331,941	315,419
Cash.....	443,310	598,640	600,303	691,946	514,113	372,764
Bills receivable.....	40,736	11,819	63,184	74,574	73,117	2,504
Balance due on acc'ts.....	53,333	3,456	10,905	11,363		19,337
Real estate.....	23,125	23,576	21,147	17,403	16,368	11,706
Springfield Branch.....	10,000					
Wood lands (balance).....			20,979	13,556	5,637	2,344
Insurance scrip.....		2,980	2,905	1,170	1,365	770
Loan to Cleveland and Mahoning R.R.....	24,000	24,000	24,000	24,000	24,000	....
Total profits, &c.....	5,917,359	6,454,130	7,323,513	6,912,435	6,843,360	6,771,346

The following table, deduced from the above, exhibits the relation of capital, earnings, profits, &c., and the rates of dividend paid in the several years :

	1861.	1862.	1863.	1864.	1865.	1866.
Cost of road, &c., per mile.....	\$24,439	\$25,936	\$27,320	\$24,337	\$24,837	\$25,413
Earnings per mile.....	6,614	9,081	11,366	13,065	12,498	10,124
Expenses per mile.....	2,801	3,320	4,443	6,619	8,118	6,565
Expenses per cent.....	42.35	36.76	39.43	40.60	65.00	64.81
Net earnings per cent per mile.....	3,813	5,711	6,923	6,446	4,375	3,559
Net earnings per cent.....	57.65	63.24	60.57	59.40	35.00	35.19
Net earnings to capital per cent.....	18.85	19.79	20.03	19.08	12.75	10.54
Net earnings to cost, &c., per ct.....	15.60	22.03	24.99	26.03	17.61	14.00
Dividends per cent—cash.....	13	15	11	15	10	8
Dividends per cent—stock.....	..	5	20	..	..	..

The net earnings, as above, are the gross earnings less operating expenses, and before any deduction is made for taxes or other extraordinary accounts.

The market price of the stock of the company (range) for each month is stated below :

	1861.	1862.	1863.	1864.	1865.	1866.
January.....	92 @ 100	110 @ 110	147 @ 175	180 @ 190	170 @ 180	110 @ 123
February.....	94 @ 94½	103 @ 110	135 @ 161	146 @ 157	150 @ 160	114 @ 115
March.....	93½ @ 100	108½ @ 113	158 @ 167	157½ @ 175	180 @ 150	111 @ 115
April.....	90 @ 95	112 @ 115	158½ @ 160	165 @ 174	..	114½ @ 115
May.....	91 @ 92½	112½ @ 116½	160 @ 165	163 @ 168	180 @ 85	114 @ 115
June.....	93½ @ 97	119 @ 120	159 @ 161	167½ @ 169	180 @ 180½	116 @ 118
July.....	94 @ 98	113 @ 125	155 @ 160	149 @ 170	180 @ 183	110 @ 112½
August.....	94 @ 95	118 @ 125	135 @ 155	170 @ 171	184 @ 180	110 @ 111½
Sept'r.....	95 @ 98½	121 @ 125	150 @ 155	170 @ 170	125 @ 133	111½ @ 115
October.....	96½ @ 99	123 @ 133	160 @ 160	164 @ 164	127 @ 130	113 @ 115
Novem'r.....	97 @ 99	125½ @ 133	155 @ 157½	170 @ 170½	127 @ 130	111½ @ 112½
Decem'r.....	100 @ 102	141 @ 145	163 @ 181	180 @ 183	125 @ 127½	109 @ 112
Year.....	90 @ 109	108 @ 145	147 @ 181	146 @ 183	124 @ 180	109 @ 123

INDIA RAILROADS AND THE COTTON TRADE.

The efforts recently made by the English Government to develop the resources of its vast empire in Hindostan, evince remarkable energy and sagacity. Probably no country in the world has made more material progress within the last few years than British India. Notwithstanding the discouragements arising from the mutiny of the Sepoys, and the disasters of famine and financial collapse, the present condition and future prospects of the people have been greatly improved. Railroads have been built, highways have been thrown up, canals widened and deepened, obstructions removed from rivers, bridges constructed over rivers and mountain chasms, and the jungle has been rendered passable for the first time.

These great changes in the condition of the interior of British India were initiated, or, at least, actively commenced in accordance with a policy adopted at the commencement of our civil war. England, in place of attempting to break up our monopoly of the cotton trade by an open and formal assistance of the South, resolved to effect the same object by other and surer means. Her statesmen, with far reaching sagacity, resolved to improve the opportunity afforded by the American crisis, so as to attach the tottering Indian Empire to the imperial government by a bridge of gold. India has always been famous for cotton

manufactures of unrivalled fineness and elegance, and it was known that her climate presented admirable facilities for the culture of the raw material. Under the stimulus of high prices the whole world was invited to compete for the production of cotton. But special measures, as is well known, were adopted to develop its culture in British India, and for this purpose the wealth and experience of the English people and government were brought into requisition.

The opportunities were favorable. The Imperial Government had got rid of the cumbersome and obsolete machinery of the East India Company, and assumed direct control of the vast Empire of India. In 1860-61, the Marquis Dalhousie, Governor General, inaugurated the extensive system of internal improvement, which was to enable the people of Hindostan to compete with America for the cotton trade of the world. To effect this object great changes were required. The most favorable cotton regions of India were inaccessible for want of proper facilities for communication. In order to get the staple to a market, it was necessary to carry it by man and horse power over vast tracts of jungle, across mountains and ravines, and ferry it over great rivers.

To obviate these difficulties, the railroad movement inaugurated was of the most comprehensive character. The population of India subject to the English government is probably not less than two hundred millions. The country comprises an area of 1,364,000 square miles, stretching 1,800 miles in length and 1,500 miles in breadth from east to west. There is a coast line of 3,200 miles, of which 1,900 are on the Indian Ocean and 1,300 on the Bay of Bengal. The climate is tropical, but embraces every variety of temperature from the extreme cold of the Himalayan mountains to the warmth of the tropics. This great country is broken up into an almost endless geographical diversity. There are vast and impassable jungles, huge forests, mighty rivers, mountain chains and extensive plains, the whole being combined with a wonderful luxuriance of vegetation, which at every step obstructs progress and almost prevents any passage by man or beast.

It was over this country, presenting so many difficulties, that Lord Dalhousie contemplated his admirable network of railroads. The system was, of course, planned with reference to the geographical features of the country, so as to connect the extremes of the vast empire with grand trunk lines, from which branch lines, or feeders, might be constructed, according to the future requirements of local commerce. Four thousand six hundred miles of railroad were to be built, at an estimated expense of \$400,000,000. The credit of the Imperial Government was granted to private companies, guaranteeing a certain amount of interest on all money invested in Indian railroads. The government wisely left all details of construction and management to the energies of the companies themselves, which had every motive for economy, as all money earned above the guaranteed dividends was clear gain. This system worked so well, that last year several Indian railways exceeded the 5 per cent. guaranteed interest. During the half year ending December 31st, the East Indian and the Great Peninsular railroad companies were able to declare surplus dividends. Half the amount of surplus income was devoted to the repayment of former advances for interest by the government, and the other half was divided among the stockholders.

The net amount of guaranteed interest paid by the government diminishes every year. In 1865 the amount was £1,450,000; in 1866 it was £800,000, and this year only £600,000 was required. These figures indicate the profitable character of these Indian railroad enterprises.

The original system of Indian railroads contemplated the establishment of communications between Bombay, Madras and Calcutta, the three great centres of military and commercial power. The extremes of the empire were united, and roads were cut through the great agricultural and producing districts. The East Indian Railroad Company has now under its management 1,310 miles of railway, constructed at an expense of \$100,000,000, and is the longest line of road in the world under one company. The Great Indian Peninsular road will be 1,233 miles long when completed, and next year it will be open for traffic along its entire length. In 1868 from Calcutta to Bombay, a distance of 1,458 miles, there will be an unbroken railroad communication. The branch lines connecting with the main stems are of great extent, and will cost as much money as the main roads. To show the progress of Indian railroads it may be stated that it is only fourteen years since the first line was opened in that country. At the present time there are 3,200 miles in operation, and next year a thousand additional miles will be completed.

This development of railroads in British India is of the highest importance as affecting the cotton trade. Formerly we enjoyed a monopoly of the market; now, nearly one-half of the cotton manufactured in England is derived from India alone. A late Liverpool circulars estimates the quantity of American cotton now on hand and to arrive before December 31st, 1867, at 680,000 bales, while the supply of India cotton for the same period is estimated at 925,000 bales. Without expressing any opinion as to the correctness of these figures, the more important fact for us to remember is that the manufacturers of England have so altered and improved their machinery as to be able to use in much larger proportion than formerly the shorter India staple, while, at the same time, the quality of cotton from that country has been decidedly and steadily improved, and is being more carefully prepared for market. Judging then of the future from the past, it may be expected to equal the American article at no distant period.

The establishment of railroads in India removes the chief obstacles to the growth of an almost unlimited supply of cotton. The country is admirably adapted for it, and the teeming population has long been familiar with the staple, and exhibit great aptitude in its culture. The best cotton regions have not yet been opened to the world; the only facilities for reaching a market being the slow and expensive process of cattle teams. The new railroads, however, will convey the products of these regions to market cheaply and expeditiously. And it is a noticeable feature of Indian railroad companies that their revenues are derived from goods rather than from passengers. Of \$35,000,000 income of Indian railroads during the three years ending June, 1866, two-thirds were received from merchandise traffic.

These facts throw considerable light on the future of the American cotton trade. They indicate that American cotton will henceforth be subject to a keen and active competition. The cheapness of labor in India will

also tend to place us at a disadvantage, as it is doubtful whether the freedmen can work as cheaply as the Hindoo, who lives on a handful of rice a day, and whose clothing consists of a yard of calico a year. It is evident therefore that the trade in our chief staple will be subject in the future to new conditions that may seriously affect our entire country. In this view it is of the utmost importance that every facility should be extended to the cultivation of the staple in the Southern States, and that every obstacle should be removed. The injudicious cotton tax, that operates as a direct bounty to foreign production, should be instantly repealed, and new capital should be tempted into the production of the staple by the indispensable guarantees of security and political quiet.

THE GROWTH OF OUR CAPITAL AND INVESTMENTS.

In every country where a high degree of industrial activity and material prosperity prevails, there is continually going on an increase and accumulation of capital; and the laws by which that increase is governed have received some attention from political economists, though far less, probably, than their importance deserves. Of these laws, one of the best established is that the capital of any nation increases in proportion as individual property is protected by law and as safe remunerative investments are easily accessible to all classes of the community. In Mexico and some of the South American republics, property of all kinds being insecure, capital increases very slowly, if at all; and when the insecurity reaches a certain point, capital undergoes an actual diminution, and the country grows poorer every year. In England, on the contrary, and in this country, where the central principle of the laws rests on the security of person and property, and where the rights of capital are fenced round with all the safeguards which the wit of man can contrive, wealth grows very rapidly, and the increase of capital has surpassed anything ever realized in the history of modern nations.

Next to the security of property, one of the most important conditions for the increase of wealth is that good investments shall be easily accessible to all classes of men who have the ability, by frugal thrift and skillful industry, to amass a surplus above their wants. In this respect, for some years past we have had an advantage over other countries. It is true that our currency for three or four years after the commencement of the war, was being gradually inflated. But the effect of the redundant issue of paper money was twofold. It acted in favor of the poor and of the great masses of debtors throughout the country, by enabling them to pay their debts in a denomination of money of less value than that in which they were incurred; and what is of more importance for our present purpose, it gave that stimulus to all kinds of industry which an abundant currency among an industrious, energetic, ingenious, versatile people never fails to develop. The rapid, steady growth of wealth, and the extraordinary material prosperity which resulted astonished our political economists, because it was realized in apparent defiance of some of those general facts and laws which they had been accustomed to regard as equally stern and unyielding with the laws of gravitation. Notwithstanding that in the prodigious expen-

diture of the war, capital was annihilated and spent with a profusion unknown before, the industry of our people created new capital as rapidly as the old was wasted. If we spent two millions a day on the war, we made three or four millions a day by accessions to the activity of our production. To supply the place of a million of our hardworking citizens, we invented or constructed labor-saving machines, which, at less expense, would do the work of several millions of men. It was with reference to this state of things that Mr. Seward, on a memorable occasion, asserted publicly that "not only had the war not impoverished any body but it had largely augmented the national resources." Something of that enduring valor, resistless impetuosity and overwhelming force which immortalized our fighting armies in the field seemed to communicate its fire to our industrial armies in their peaceful arts at home. Consequently every body seemed to be growing rich, and as was natural, there never was such luxury and extravagance among any people in the world as prevailed in this country during the years 1863 and 1864.

Such were the results of the extraordinary investments for capital which were developed on all sides by the extraordinary stimulus which operated during the war. It would be absurd to say that all the growth and wealth which were then realized were healthful and permanent, but it would be equally wrong to suppose that the augmentation of wealth was radically unsound, shadowy and unsubstantial. We might as well say that the vegetable life of the tropics is less sound and perfect than that of Russian America because it is produced more rapidly and under the stimulus of a more exciting temperature. It was one of Mr. McCulloch's speculative errors when he was Comptroller of the Currency that he failed to recognise the vast forces which were at work to increase the wealth of the country. In a circular letter to the National Banks, containing practical hints of the greatest value, he ventured into more abstract disquisition, as follows:

"Although the loyal States appear superficially to be in a prosperous condition, that such is not the fact: that while the Government is engaged in the suppression of a rebellion of unexampled fierceness and magnitude, and is constantly draining the country of its laboring and producing population, and diverting its mechanical industry from works of permanent value to the construction of implements of warfare: while cities are crowded, and the country is to the same extent depleted, and waste and extravagance prevail as they never before prevailed in the United States, the nation, whatever may be the external indications, is not prospering. The war in which we are involved is a stern necessity, and must be prosecuted for the preservation of the Government, no matter what may be its cost; but the country will unquestionably be the poorer every day it is continued. This seeming prosperity of the loyal States is owing merely to the large expenditure of the Government and the redundant currency which these expenditures seem to render necessary."

In a Comptroller of Currency such a want of appreciation might pass without attracting special notice, but in a Secretary of the Treasury it could scarcely fail to lead to some errors in wielding the vast administrative powers which in the anomalous condition of our finances are at present concentrated in his hands.

Did space permit we might take the principle that "capital increases in any country in proportion as safe remunerative investments are offered to it," and show how it illustrates one of the compensations which our national debt has brought with it. In no other country in the world are

there such lucrative investments for larger or smaller amounts of money as are offered among us. In no other country can the frugal laborer or domestic servant, when they have saved up 50 or 100 dollars, invest it so as to bring in an annual income of 7 to 8 per cent. In no other country can the millionaire place his money so as to secure with equal returns of interest an equal degree of security. The rapid increase of capital in England is partly attributed to the safe investments which consols afford for all moneys whatsoever, and if offering, as they do, absolute security with moderate interest, the British consols have done so much to stimulate the growth of wealth in England, what may not our American consols be expected to do in this particular, when they offer with absolute security a high rate of interest. We shall not only attract foreign capital, but we shall utilize our own capital and make it fructify. For now, as heretofore, it is a distinguishing characteristic of this country that partly because of our vast regions of rich, virgin soil, partly from of our mineral, manufacturing and agricultural industries, partly from of the ingenuity, energy and versatility of our people, but more because of the free air we breathe, and the free institutions under which we live there is an almost tropical impulse given to the growth of wealth among us; and in finance as well as in politics, Mr. Madison's words to Miss Edgeworth are verified, that Providence seems to have set the United States to do many things which before were thought impossible.

In view of these facts we see how it was that our people were able to lend, without foreign help, so vast an amount of capital as 2,500 millions of dollars to the Government to carry on the late war. In that war we wasted much of our capital, but what was left fructified with such rapidity that it left us at the close richer than we were at the beginning.

We also see that there is really no danger of repudiation of our public debt. It is too widely distributed among ourselves, it is held by too many of our people, it forms too fundamental a part of the great fabric of our national life to admit of its being disturbed. To repudiate our national debt would be to shake the security of all property throughout the country. A revolution of such magnitude would end in the disruption of the nation, and would deservedly make of us a monument for the contempt and wonder of the nations of all succeeding times. So monstrous and absurd is the anticipation of repudiation, that the very word has long ceased to be whispered by our most confirmed croakers. Occasionally it is urged, we observe by certain unappreciative English journals, which thus deter some of their countrymen from investing in our bonds, doing us the service thereby of checking the too great foreign demands for the most remunerative, safe investments which can be had at present by British capitalists.

We have said the foreign demand is too great. For ourselves, we do not look with so much favor on the exportation of Five-twenties as do some persons for whose judgment we have the highest possible respect. If, while the national debt was increasing, the growth of our wealth was so great that we could absorb the bonds as they were issued, surely, now that the debt has ceased to increase, we can take care of these bonds, by means of the constant augmentation ever going on, of our rapidly growing wealth. Besides our bonds are too cheap as yet. We cannot look with complacency on their passing into the hands of foreign creditors at eighty cents on the dollar for six per cent. gold-bearing Five-twenties.

Moreover, there is another fact which may be variously interpreted, but is not without interest. Our daily papers have recently given considerable attention to the increasing disposition of capital to invest itself in railroad property. During the period in which the national debt was growing, the new federal securities which were being issued absorbed our new capital, but two years have passed since the debt ceased to grow. As our wealth has been growing during that time, the argument is that the national securities are not now sufficient to afford the means of investment. Hence, it is said, the attention of capitalists is diverted to other securities, and to those of the most promising railroads among the rest. We do not endorse this opinion. It is, however, worthy of examination in connection with the general movements of capital to which we have referred.

ECONOMY IN FUEL.

Some very interesting and important experiments have recently been made in England with what is called Lancaster's patent for inducing the more perfect combustion of fuel in furnaces. The enormous amount of coal wasted in the furnaces, as at present constructed, has long engaged the most serious attention, adding as it does materially to the cost of steam power. In the furnaces as at present constructed, a very large percentage of the heating power escapes through the funnel, and the smoke which should be consumed passes off into the air. On shore the atmosphere is polluted and vitiated, and at sea those on board ship are annoyed by the "smoke fog," which frequently interferes with the "look-out." In Lancaster's patent the smoke is consumed, and not only is the heating power greater because more sustained at a regular temperature with less variations, but the saving of coal is something extraordinary. For the benefit of the steamship-owning community, who are so largely interested in the matter, we subjoin the results of some of the experiments on board the steamer *Demetrius*, Captain Baron. The *Demetrius* is a steamer of 418 tons register, fitted with engines of 70 horse power nominal, her furnaces being constructed on the Lancaster principle. The ship is a fair specimen of the merchant steamers engaged in the Mediterranean and other trades. In order to test the advantages of the Lancaster principle, a trial trip was made from Liverpool to Llandudno Bay, and the very great value of the invention was most satisfactorily demonstrated. It was found that a saving approaching one-half was effected, and that the funnels were comparatively smokeless. The engines were worked at 65 revolutions, and there was a remarkable regularity in firing, indeed, the fireman had a light time of it. The measured mile was run in 6 minutes leaving Liverpool, and in 5 minutes 40 seconds on the return trip. It was found that almost any amount of pressure could be obtained, the combustion being most complete, and the heat intense and well diffused over the whole of the furnaces. After the run the tubes were found to contain less deposit than under the old system. The engineers on board expressed their very high approval of the Lancaster system. We may state that the invention has already been applied to locomotive and stationary engines, and that it has been found to work exceedingly well. The principle is also applicable to puddling furnaces.

TYPOGRAPHY AND TYPE-SETTING MACHINES AT THE PARIS EXPOSITION.

BY F. F. BLANC.*

For four hundred years past type-setting, this important part of typography, has been performed in the same manner. While in all other branches of industry machines came to aid or supplant the hand of man, compositors alone have remained at their posts, perfecting their art, it is true, and making unparalleled efforts to acquire a skill which in many instances is truly marvelous and would not fail to astonish the first old printers if they could see what the "craft" is able to do now-a-days.

The fact is, it is by no means easy to replace by a machine the constant attention indispensable to the compositor, who incessantly tries to familiarize himself with the thoughts of the writer whose manuscript he is studying. Just try to make a machine read handwritings such as are seen only too often, and the illegibility of which frequently puzzles even the writer when the compositor in despair places before him the words which he was unable to read or to guess. To be a good compositor it is not sufficient for a man to have good eyes and nimble fingers, he must also have some literary knowledge, and especially be familiar with punctuation, that his "proofs" may not look too bad. He must in some sort, as it were, identify himself with the author, penetrate his peculiarities and fully understand what he means. A compositor destitute of these qualifications can not claim a distinguished and lucrative position in his honorable trade; he must devote a great deal of time to the correction of his "proofs," makes, of course, less money than his more skillful colleagues, and will lose his place a great deal sooner than these.

It is owing to this careful and pains-taking attention which the compositor must give to what he sets up that machines hitherto have not been able to fill his place in the printing offices. But inventors, these tenacious benefactors of mankind, do not allow themselves to be disheartened, and being unable to supplant the compositor entirely, they have sought the means of assisting him and facilitating, by a more rapid process, the setting of the letters destined to form words, always leaving him the responsibility for the work executed by his will. Starting from this idea, M. Delcambre, more than twenty-five years ago, invented the *pianotype*. This machine, which combines a great many peculiarities of the piano with those of the sewing-machine, created some sensation toward the year 1845. Several proprietors of printing-offices bought these machines, and for a short time it was really believed that a revolution would take place in the great realm of typography. A great number of these machines had been manufactured, and a single printer purchased ten of them. The trial proved deceptive, and the printers soon cast aside as worthless the instrument which had cost its inventor a great deal of money and labor.

One of the principal causes of this failure was the distribution, that is to say

*Translated for the Cincinnati *Commercial*, from the *Revue de Paris*.

the return of the type used in composition to their places in the cases. The compositor was obliged to distribute them with his hands, as is being done now, then to put the equal letters together in order to place them in the openings of the type setting machine. It is easily seen that this preparatory composition made the compositor lose already in advance all the advantages which he derived afterward from the performance of the composition by the machine. The machine was obviously incomplete. It was all-important, therefore, to perfect it, or rather invent a distributing machine which would place the types in the order in which they must be to serve again for the formation of words; it was impossible to derive any benefit from the former machine without adding the latter to it. The inventor, therefore, had to go to work again, and to-day we see at the Exposition both the perfected machine and the *distributer*, all manufactured by Messrs. Frideric Delcambre, Crays & Co. The first time that I saw this type-setting machine, I could not repress my admiration, and I should have willingly awarded a grand prize to its inventor. I did not see and could not see whether there were imperfections about it. I scarcely ventured to make it work or ask explanations about it, so much I was afraid of having my fond hopes dispelled.

In effect, there is a fascination in the spectacle presented by the types falling so nimbly and noiselessly under the pressure of the fingers which touch the keys of the finger-board, one believes that perfection in this attractive trade has been attained. The types are detached one after another, glide through small channels on an inclined plane and form a number of words from which the compositor takes enough to fill his galley, which is attached to the end of one of the above-mentioned channels. But I had to restrain my admiration. I had to examine carefully and conscientiously what future this new machine might have. To describe all its details would be tedious and would not give my readers an adequate idea of its value. Therefore, it seems to me preferable to speak at once of the results of my investigation.

The machine itself works certainly very well, and if the all-important thing was to drop the types regularly, I should hasten to state that a most valuable increase in the rapidity of type-setting had been accomplished. But it is complicated, and three persons are required to work it, one to distribute, the second to compose, the third to arrange the words in the galley. I do not care whether women or children may be employed to fill one or more of these places. The advantage or loss are to be calculated according to the time used by the compositors and not by the number of the hands employed. Now I do not hesitate to say that the fact that three persons are required to work the machine neutralizes the advantages to be derived from it.

In the present system of type-setting, when a compositor loses time by repeatedly reading the copy which he has before him and correcting what he has set up, it is he alone that loses, and this loss of time, which is renewed very often during the day, and frequently caused by trifling things, is sustained only by himself and does not injure two other persons. Here, on the contrary, whenever he stops, his two assistants at the galley and the distributor must do so too. This is more serious than it seems at first, and would almost suffice to make us question the value of the whole invention.

On the other hand, it is to be regretted that the compositor working at the finger-board can not himself correct what he has set up. It happens often that the compositor sets up a word of which he is not quite sure, and corrects it on reading the end of his line, being better informed by the subsequent words which he has read since then and which give him the true sense of the phrase. In punctuating, above all things, this way of correcting is the best. Now, to do this, the compositor must have the copy before him. By repeatedly examining it, he will afterward be saved the trouble and vexation of having his proofs disfigured by an endless number of corrections. The compositor arranging the lines in the galley of Delcambre's machine does not see the copy at all. It is in the hands of his companion working at the finger-board, who continues to touch the keys as if the man at the galley need not see the manuscript at all, and as if the second part of the labor was not inseparable from the first. These considerations deprive the type-setting machine of its importance and dispel the enthusiasm with which we contemplate it at first. And yet all this is nothing compared with the great difficulty of distribution, which is not surmounted by the machine.

The distributor attached to the type-setting machine is destined to save it, or at least counteract its imperfections. Instead of doing so, instead of facilitating the process of distribution, it impedes it. I can not explain the details of the distributor, which would take too much space, and will say merely that, as in setting up, the compositor must give his attention to the distribution, and that the work is performed by his will, under his fingers, and while he is reading his copy. He who has seen our compositors engaged in distributing is astonished at the rapidity and skill with which they perform this part of their typographical trade. It seems impossible that the work should be done better and with greater regularity and quickness. In effect, this hand, which is in incessant motion and which seems to have an eye on every finger, will a long time yet successfully defy the mechanical distributor. The advantage of the latter is, that it puts back in the cases entire words, which may be placed again in the type-setting machine without recomposition, which was one of the weak points of the first invention. This advantage, however, has to be dearly purchased. The manner in which it is constructed does not permit the compositor to read directly the lines which he is about to distribute. He is obliged to have recourse to a mirror reflecting them in a precarious and imperfect manner. In distributing, quick and unhesitating reading is of the highest importance. The mirror arrangement is not calculated to facilitate the operation. It is precarious already in broad daylight. You may imagine how it will be at night or when the sky is overcast. I must say, therefore, greatly to my regret, that the distributing machine does not perfect the type-setting machine, and as the latter in itself is of no use, the problem of mechanical type-setting has not yet been solved.

Let us now turn to another machine, that of Mr. Flamm, and constructed by M. Croyen-Carmouche. This machine, I must confess, embarrassed me not a little accustomed to hear our printers talk of a Danish machine which I did not see at the Exposition, and of Delcambre's machine, both of which use ordinary types, we had thought all researches in this direction would follow the same

beaten track. Mr. Flamm did not look at the matter in this light, and, regardless of what had been tried prior to him, bravely entered the lists with a machine entirely suppressing the typographical case and the letters which it contains. An alphabet, with all its accessories, capitals, marks of punctuation, is all he cares for. He does not suppress the compositor, but certainly the material which the compositor uses at present. To tell the truth, Flamm's machine makes matrices in place of setting type, and the *clicheur* is here indispensable. The letters which are to compose the words are placed in a reservoir turning on a pivot; these letters imprint themselves at the pleasure of him who works the apparatus in a paste or *flan* prepared beforehand, and placed under the above mentioned reservoir. To facilitate this operation the inventor has had every letter, or marks engraved on the surface of the reservoir; the compositor presses on it and thus lowers the letter that he needs. The *flan*, which becomes a matrix, is supported by a small wagon which moves under the reservoir as is required, transversely or longitudinally; the former movement is required for the formation of the lines; the latter to obtain the length of the pages and to divide the lines.

On seeing this very ingenious and well-working machine, an expert will at once ask himself how the justification of the lines is to be brought about by it. With moveable letters, when the words do not terminate the line, and the space of a few letters which cannot be separated from their words remains vacant, the evil is remedied by an enlargement of the intervals between the words of the line; in the Flamm's system this is impossible. But to obtain the same result Mr. Flamm has placed under the reservoir an apparatus with a moveable needle; this needle touches a small bell and indicates at once to the compositor when it is time to think of this sort of work. He proceeds then to enlarge or narrow the intervals between the last words. An experienced hand will find no trouble in surmounting this difficulty.

However, this is not the only difficulty, there is a much greater one. The real difficulty is to be found in the correction. To correct what is set up, fresh paste has to be spread over the imperfect part, and the composition of the word or the line has to be recommenced. The difficulty is much increased in case the corrections to be made augment or diminish the number of lines. This difficulty seems to me so great, that it seems to me Flamm's machine can only be used in reprint, in printed matter, not necessitating any change or important corrections.

Now, it must be stated that as a labor-saving machine, Flamm's invention is not very remarkable, for it does not work more rapidly than an ordinary compositor. Its whole advantage then would consist in the suppression of the printing material; but, to judge from the prices affixed to the machines, it is doubtful whether they do not require a capital equivalent to that of our ordinary offices.

Flamm's machine for lithographers is much more practical, and will do better service than his common printing machine. For the rest, he is not the only inventor who has thought of supplanting type-setting by matrices. An American has exhibited a machine which, though constructed in a different manner, leads to the same results, with the exception of its advantages to lithographers. My censures regarding justification and correction are applicable to it as well as to Flamm's machine. For the rest the inventor admits that he has not yet found

"le dernier mot," (the last word). He is happy at having invented the principle of his machines, and calls upon other inventors to perfect it. This is shown, at least, by the words which he graciously printed in reply to the questions which I put to him: "The inventor of this type setting machine desires to have it understood that he claims by no means to have reached perfection."

HOW MEXICAN SILVER MINES ARE WORKED.

A newly discovered mine belongs to any person who denounces it, provided a shaft of at least ten varas in depth be sunk on the vein within sixty days after it is denounced. A claim consists of 200 varas square. Mines that have been abandoned, or those in which work has been suspended for a space of four consecutive months, may also be denounced. The reducing and crushing work (*haciendas de beneficio*) are considered as having been abandoned, and may become the property of whomsoever denounces them when they no longer serve for their original purpose—when the roots have fallen in, and the machinery has been removed—but the owner has a delay of four months to resume operations if he wishes to preserve his property. A miner or the proprietor of metallurgical works cannot be expropriated by his creditors, who may take possession of a mine and work it for their own benefit until the debt contracted by the owner is extinguished; but they are compelled by law to allow him sufficient means to maintain himself and family. A shepherd or a laboring man accidentally discovers near these *crestones*, which rise above the surface, quartz containing metallic substances. He endeavors to procure some rock at a depth where it has not felt the action of the atmospheric air, builds a fire in which he casts a few pieces of ore at a very high temperature, and if specks of silver are observed the mine is denounced for the purpose of securing possession of it to the discoverer. The law requires a shaft to be sunk in the vein of at least ten varas within 60 days after the denouncement, at the expiration of which if the mine has been ascertained to be new one, or to have ceased to be the property of a former denouncer, a grant is made of 200 varas square. The grantee then procures partners to develop the mine, should he lack capital for that purpose. The value of the mine is divided into twenty-four shares, called *barras*, the half of which is given over to the capitalists, named *aviadores*. The regular development of the mine then commences. When a depth has been reached where silver is generally the most abundant, and the quantity of water and expenses of extracting not yet too considerable, the yield is very remunerative; at this stage of development, reducing works are erected (*haciendas de beneficio*) frequently on a large scale not always based on the future general yield of the veins. At the same time underground work is carried on to facilitate mining operations, as also the extraction of the ore, and the draining of the mine. When mines in the bonanza condition are in the hands of one individual, as in the case of Counts de Valenciana and Reglas, and the Marquis de Rayas, these works are remarkable not only for their magnificence and extent, but for their utility in less prosperous times, when without them the ores becoming poorer could not be extracted

through the older communications. In most cases at the present day the 24 barras, which constitute the shares of a mine, are divided into small fractions, and represent numerous conflicting interests which seem to combine but for one purpose, that of realising from the undertaking as much as possible, disregarding of the evil consequences which may affect the future prosperity of the mine. Their motto appears to be, "Sufficient unto the day is the profit thereof." The consequences of this view of mining operations is that no regular and methodical course is pursued, the richest ore only being extracted at several places at the same time, or where it is most easily obtained, masses of poorer ore being left behind, the working of which is resumed when the bonzana ceases. It is difficult to understand why a small amount of these enormous profits is not devoted to researches which are undertaken, only when the expenses exceed the profits, and the prospects of a profitable investment are doubtful. When the zone of the greatest yield has been worked through, if the depth is such as to render the cost the cost of extraction too considerable, the bonzana ceases. The poorest ore left in upper parts of the mine is then worked, and, as the greatest expense is the draining, the water is allowed to fill the lower works. For some time the reserve of ore of medium yield is sufficient to cover expenses; but beyond a certain point, day or contract work for a certain weight of ore extracted is no longer profitable; and in order to guard against the chances of loss, the miners are allowed an interest in the profits, say one-sixth, one-third, and even one-half of what they extract. The owner furnishes tools, light and powder, the draining and hoisting being also at his expense. This is called *partido*; the miners, who are then called *buscones*, prefer it to day or task work, and as it is voluntary labor they take it easy, and find a certain charm to be indebted to chance for their salary, which will frequently, in one week, be enormous, after working for a month or more without earning scarcely sufficient for their maintenance. Gradually the resources are exhausted, and the number of men only required by law are kept at work, in order to retain possession of the mine, and new *aviadores* are found who supply the funds necessary for the expense of draining and continuing the work in the lower part of the mine, running prospecting drifts at points where ore was expected to be found, but which had been neglected when the mine was full of water.—*New Orleans Price Current*.

CO-OPERATIVE SHIPBUILDING.

Perhaps we should have said co-operative shipowning, but that the two are very closely connected with each other. Our purpose is to illustrate a phase of the co-operative principle which is now, and has been for some years, in successful operation in the maritime provinces. We allude to the system of shipbuilding and owning in shares, a system which is largely practised both in New Brunswick and Nova Scotia, and which we believe to be capable of a much wider range of application than it has yet received. The extent to which shipbuilding operations have been carried in the maritime provinces is almost without a parallel, and in proportion to their population they have more shipping than any

other similar population in the world, the co-operative system contributing more than any other cause to this result. In the remarks we are about to make we shall refer more particularly to New Brunswick; but they are equally true in a general sense when applied to the sister province of Nova Scotia. From a reference to official papers, we find that the total amount of shipping on the registry books of the province in the year 1865 (the latest return published) was 1,019 vessels, measuring 349,675 tons, and that the quantity of the new shipping built during that year amounted to 148 vessels—65,474 tons. Twelve of these vessels measuring 11,774 tons, were sent home for sale, and it is pretty good evidence of the superiority of New Brunswick-built shipping when we find that they average from 10s. to 20s. per ton higher in price than Quebec-built vessels. A large number of those remaining are, however, owned and sailed by parties residing in the province, and very many of them were built under this system of co-operation. The comptroller of customs of St. John, in his last report, says:—"The business of shipowning in shares, which has now become general in New Brunswick, has done much to bring about an improved state of affairs, and has tended during the last few years to increase very materially the wealth of the country. The earnings of our vessels abroad, which are constantly coming into the province in the shape of exchange, have assisted greatly to prevent derangement in our monetary affairs. It is not an uncommon thing for a good spruced class vessel of this country to keep herself in good repair and insured, and pay for her first cost in four years, and sometimes even in two or three years." The mode of procedure is something as follows:—A number of individuals join together to build a vessel of a certain size and class, probable expense is easily ascertained, and she is divided into 64 shares; these are taken by as many individuals as there are shares, or are distributed as may be found most convenient; the payments are spread over as long a time as the vessel may take in building, usually three, six, and nine months; the outfit is ordered in England, and very frequently the first freight can be handled in time to pay the cost of outfit. There are some regulations of a peculiar kind with regard to the management. The business of the vessel is usually conducted by one of the shareholders, but if the management should not be considered satisfactory, five-eighths of the shares can take possession of her upon giving bonds to the other owners that she shall be kept in good order, and if the vessel should run in debt those who have taken possession of her are alone responsible. On the other hand, the minority share no portion of the profits which may be made during that time. Each shareholder is allowed to underwrite his own share, and, as it is the practice of all who extensively own in this way to distribute their shares among a great number of vessels, considerable advantage is derived from this source. Under this system we see there are a number of individuals, each of whom is interested in procuring freight, or otherwise forwarding the interest of the vessel. The captain probably owns a share, and the result is that these vessels are sailed cheaper and make more money for their owners than any other. We remember hearing a story that at the time of the war between the Greeks and the Turks it was remarked that the Greek vessels were seldom or ever captured, and the reason assigned was that every soul on board, from the captain

to the cabin boy, had an interest in the vessel : and whether the story be true or not, there can be no doubt that it is owing to the operation of some such principle that the success of co-operative ship building and owning is indebted. A few instances, taken from among a great many others which have come to our knowledge; may serve to illustrate the extent to which the system is carried. One gentleman residing at Fredericton owns shares in 25 vessels, in most of them only a sixteenth, and in none of them more than a quarter. Another at Dorchester has in the same way shares in 24 vessels, from a sixteenth to a quarter; and in St. John there are many parties who are interested in different vessels from two to three up to 20 or even 30 shares. It will be observed that there is little or no risk in this business (especially when the sharer's shares are distributed among so many vessels). The vessel, too, is always kept well insured, and many families derive a steady and even handsome income from this source. It should be noticed that, as a general rule, the class of vessels built and run in this way are not of large size; a great many of them are brigantines and schooners, ranging from 150 to 300 tons, and a good spruce vessel, built to class four years at Lloyd's, is considered the best kind. They may not be quite so durable as hocmatic, but they cost less, and carry a larger cargo on the same draught of water.—*Montreal Trade Review*.

RUSSIA, PRUSSIA, PERSIA AND INDIA IN TELEGRAPHS.

The following are said to be the exact terms of the arrangements lately entered into by the Russian and Prussian Governments with Messrs. Siemens Brothers, of London, and Siemens, Halske & Co., of Berlin and St. Petersburg, in relation to the construction of a new line of telegraph between England and India through their respective territories. The latter firm have for many years been under contract with the Russian Government to maintain their lines of telegraph in working condition, one of the partners residing for that purpose at Tiflis, in the Caucasus. The Russian Government have now agreed to give a right of way through Russian territory, free of cost, and a concession for working a new line of telegraph and stations for twenty-five years from the date of opening. The government yield to the company their right of forwarding messages to and from India upon the Imperial Telegraph lines, and engage to hand over to the company all such messages touching Russian territory for transmission over its lines. The company is to work the line by means of its own officials. In return for these privileges the Russian Government exact a royalty of less than one-third of the existing internal tariff—that is to say, a royalty of five francs per message, which is to be diminished rateably as the through tariff between England and India is diminished from the existing rate of £5 1s. On the other hand, the Prussian Government engage to construct and to maintain two special lines through North Germany at their own expense, and to hand them over to the company for the period of twenty-five years. For these services of construction and maintenance, and for the privileges mentioned in the concession, the Prussian Government charge 2½ francs per mes-

sage, to be reduced as in the case of Russia, in the event of the through tariff being reduced. All messages to and from India, touching German territory, will be handed over by the German officials to the company for transmission over its lines. A right of landing cables on German territory is given to the company. As there are no private telegraph lines in Russia or in Prussia, the company will enjoy a complete monopoly of all the through messages. The Electric and International Company also agree to lease two wires of the cable lately laid to Hanover to the Company. The British Government assist the whole arrangement and engage to give every facility for the transmission of messages over the lines which they work in Persia, between India, Ispahan and Teheran. The Persian line in British hands consists of two wires, and works very well. The British Government also promise to reduce the tariff over the Persian lines and the Persian Gulf cable so soon as an increase of messages shall occur in consequence of the new lines. The Prussian and Russian Governments permit the transmission of half messages to and from India of ten words each at half the present tariff, and it is expected that the same concession will be made by the British Government. At present no message can be charged at less than twenty words. The company will lay a submarine cable in the Black Sea, 280 miles in length, between the Crimea and the Circassian coast. By means of these several arrangements an English company will hold and work an uninterrupted line of telegraph from England to Persia, the line from Teheran to India being already in the hands of the British Government. The few sections of the line which consist of submarine cables are laid in shallow water, where repairs can be effected without delay or difficulty. The cost of land lines is only one-third or one-fourth that of submarine lines, and the great interest which the respective governments possess, through whose territories it is proposed to pass, that their countries should form the telegraphic highway to India and the East will, it is considered, insure the efficient maintenance of the contemplated communication. Negotiations are in progress with the Persian Government for an independent line in the company's hands between the Russian territory and Teheran. Immediate steps will be taken to raise a portion of the capital in England and to commence the work.

EGYPTIAN AGRICULTURE.

The report of Mr. Stanley, the English Consul at Alexandria, states that the present condition of the agricultural industry of Egypt has been so entirely diverted from the rotation of crops in its normal state that any person now going through the country to take a view of the produce of the soil would be altogether misled. The enormous profits which were realised by the growth of cotton during the American war have caused this. When the Cotton Supply Association sent out their Secretary, Dr. Forbes, to India, that gentleman was bearer of a memorial to the late Viceroy Said Pasha, praying his Highness to use every possible effort to encourage the cultivation of cotton. The reply was characteristic, and evinced a correct impression and almost a prophetic dread of the revolution

that would be produced by an immoderately enhanced price of cotton. He said : " Prices alone will prove a sufficient stimulus with out any effort on my part ; but God forbid that I should ever see the abandonment of the ordinary succession of crops for the production of cotton, to the exclusion of those products on which we subsist." Within a short period of that time Egypt, which had ever been a large exporter of grain, of beans, &c., had to seek food from other countries, and became an extensive importer. Grain was considerably dearer in the interior than at Alexandria. In some places absolute famine ensued. An undesirable change was wrought, the recovery from which will be as slow as its accomplishment was rapid. The value of land was quadrupled, wages rose in an equal ratio, laborers earned so easily sufficient for their wants that they became indolent, an excessive luxury sprang up, and that not of a nature to benefit the commercial world, being displayed in a demand for white slave girls, costly pipes and other such appliances which (the consul remarks) do not much benefit the industrious world without. Meanwhile the land, from the constant crops of cotton in succession, has become impoverished. Cotton, however, has long been, and must continue to be, the most important production of Egypt. It is sown in March or April and arrives at maturity in August or September. An average yield in good summers is 300 lbs to the acre ; the New Orleans variety has been found to yield 800 lb. per acre ; but it is found unmarketable, and is therefore little cultivated. Cotton seed has also become an important source of profit. In 1858 the ardeb of 270 lb. sold for 25 tarif piastres, now it sells from 65 piastres to 75 piastres. Formerly it was not of sufficient value to justify of its being sent to Alexandria, and it was used as fuel. Now it is all shipped to Europe, and from it is pressed an excellent oil, and from the refuse a cake is made which is said to be more nutritious than linseed cake. The cattle murrain, which commenced in Egypt before it proved so severe a scourge in England, destroyed, the first year, 800,000 head of horned cattle. In lower Egypt almost every animal was destroyed, and it will take years to restore the number of animals.

THE RAILWAY REPORT OF INDIA.

The annual report on railways in India, by Mr. Juland Danvers, has just been presented. The traffic for the year 1866 was affected by the commercial troubles as well as by droughts in some parts of the country and unparalleled floods in other parts. Still the two great companies, the East Indian and the Great Indian Peninsular, realized profits during the earlier half which enabled them for the first time to divide more than the 5 per cent interest guaranteed. To prevent any check to the progress of construction of the various lines from the difficulty of raising capital, the Government have at times made advances of more than a million sterling. At the beginning of the year there were 3,331 miles open, 205 were finished during the twelve months, and 101 miles since, thus raising the total to 3,637. The completion of the Great Indian Peninsular to Nagpore places India in a greatly improved position for providing this country with cotton. As regards the works in course of construction, it is expected

that the East Indian line to Jubbulpore will have been opened to the public on the 1st of the present month and that the Great Indian Peninsular will, by October or November, 1866, effect a junction at that place which will establish a through communication between Bombay and Calcutta. The total length of railways remaining to be constructed and for which a Government guarantee has been granted is 2,005½ miles. In addition, proposals have been considered for three lines, namely, one 570 miles from Baroda to Delhi, one of 500 miles, to unite the Scinde and Punjab, and one of 250 miles from Lahore to Peshawur. The first would cost £6,840,000, the second £6,000,000, and the third £3,000,000, making a total of nearly 18 millions. It has been determined not to authorize the Lahore and Peshawur, and no decision has yet been come to with respect to the others, but surveys are being carried on. There are also projected, which are evidently not regarded with disfavor by the Government, for a chord line for the Great Indian Peninsular railway to the sea coast and an extension of the East Indian across the Hooghly into Calcutta. The financial public may, therefore, still have to exercise vigilance to prevent a repetition of the old system of a too profuse grant of guarantees, by which English capitalists are tempted to come under commitments that not only prevent capital from being directed to any other country than India, but also prove extremely burdensome when any revulsion occurs from a period of inflation in the money market. The fact that the native population continue to abstain from furnishing any portion of the capital of these undertakings adds especial weight to these considerations. Out of 43,398 shareholders and debenture holders, the native proportion, which was in the previous year only a little over 1 per cent is now actually below that amount. The total capital thus far raised for the Indian lines is £67,254,820, and the further lines already authorized will raise this to £88,000,000. The receipts of the year ended the 30th of June, 1866, were £4,537,235, whilst the expenses of working and maintenance were £2,225,425, showing a net profit of £2,304,534—a result which contrasts favorably with the working expenditure of our largest English companies, notwithstanding the adverse influence of dear fuel. At the existing rate of freights, coal and coke, before they are landed in India, cost 50s. per ton, and the extra charges, so far as the western and southern districts are concerned, raise the cost to about 60s. The East Indian Company have exceptional advantages from the coal-fields near Calcutta, and the cost to them of coal per train mile is 8½d., while on the Great Indian Peninsular it is 1s. 6½d. Coal from Australia and Labuan is being tried, but wood is looked to as the resource that must in many cases be relied upon, and with that view planting on an extensive scale should take place if it is considered, annually for severally years to come.

THE TRAFFIC IN SHIP TIMBER.

The *Toledo Blade* says that one of the most remarkable features of the traffic at Toledo at present is the large quantity of ship timber shipped to tide water. In 1866 this trade was deemed very large when, prior to the 15th of August, about 540,000 cubic feet was sent forward, but the business this season has been

more than double that of last year, amounting from the opening of navigation to Saturday last to almost one million cubic feet. This timber, it should be known, is all of oak, principally of the "white" variety. It is rafted hither down the river and through the canal, and is here loaded into vessels constructed for that particular trade. There is now a fleet of ten or twelve vessels engaged exclusively in this traffic. As showing the activity in the business this season, we have collected from our files the following figures, exhibiting the amount of timber shipped, its destination from here, and number of cargoes taken away from the opening of navigation to Saturday last, July 27 :

	No. Cargoes.
To Buffalo.....	40
To Clayton.....	4
To Kingston.....	14
Total	58

The quantity shipped to each of the above ports is shown below :

	Cubic feet.
To Buffalo.....	716,600
To Clayton.....	48,000
To Kingston.....	185,000
Total.....	949,600

The timber shipped to Clayton was intended for local purposes, and nearly all of it has or will go into the lake marine. A considerable portion of that shipped to Buffalo (or Tonawanda) will be used in building for the lake marine, but by far the greater part of it goes forward to New York, where it is used in the construction of vessels. It may be safely asserted that Toledo furnishes more than one half of all the white oak timber used at Buffalo and New York in the construction of vessels. Ship builders at both the ports named are very partial to the oak from the Maumee country, as the demand which necessitates so large shipments is evidence.

As shown above, there has been shipped to Kingston fourteen cargoes, aggregating 185,500 cubic feet. This timber, as we are informed by the captain of a vessel employed in the timber trade, is not designed for use at Kingston. It is purchased for the use of the British Government, and from the port named above is shipped direct to England. We learn that there also the timber from this locality is estimated very highly for its strength and durability. Of the quantity shipped on English account all has been destined for the navy yards, to be used in the construction of war vessels.

RAILROAD REPORTS.

NEW YORK AND NEW HAVEN RAILROAD.

The earnings and expenses of this company from operations for the five last fiscal years ending March 31, were as follows :

	1862-3.	1863-4.	1864-5.	1865-6.	1866-7.
Passengers.....	\$301,754 18	\$1,134,899 23	\$1,500,333 74	\$1,548,580 18	\$1,612,638 25
Freight.....	166,614 78	214,854 03	263,904 30	340,017 79	333,851 99
Mails, &c.....	68,068 81	75,619 06	83,063 77	93,614 75	122,329 81
Total earnings.....	\$1,096,437 77	\$1,424,773 31	\$1,847,291 81	\$1,982,212 73	\$2,068,800 05

From which were paid on account of operating—

Transportation	\$222,303 91	\$318,614 26	\$465,453 68	\$469,060 31	\$543,327 05
Repairs of road, &c.....	109,635 84	64,417 69	220,915 10	255,455 84	334,726 09
Repairs of equipment.....	187,689 61	151,680 46	226,346 16	231,713 30	247,877 54
Fuel, oil and waste.....	89,890 69	136,184 30	214,902 27	194,148 80	173,697 61
Haulage by horse-power...	29,553 60	43,399 50	77,126 75	73,093 30	68,799 75
Total expenses.....	\$568,941 56	\$704,309 98	\$1,024,844 96	\$1,249,788 49	\$1,368,348 04
Earnings less expenses...	\$454,096 19	\$720,469 33	\$622,596 35	\$683,436 25	\$704,816 47

This road (including 15 miles of the Harlem Railroad) extends from New York to New Haven, a distance of 76 miles. It is a double track throughout.

The following shows the mileage of trains, the number and mileage of passengers, and the tons and mileage of freight in each year :

	1863-3.	1863-4.	1864-5.	1865-6.	1866-7.
Trains (passenger), mileage.....	418,743	466,617	539,133	535,196	551,894
" (Freight), "	97,094	104,808	104,623	101,940	108,101
" (Service), "	3,043	485	17,994	86,110	1,009
Total trains, "	518,810	570,410	652,756	672,676	679,993
Passengers carried.....	1,174,171	1,455,165	1,863,676	1,863,915	1,863,596
" one mile.....	41,843,676	53,690,428	68,736,807	66,769,592	65,221,877
Tons of freight carried.....	74,707	94,736	168,800	119,742	127,760
" one mile.....	4,429,574	5,689,174	8,048,608	6,787,444	7,269,813

The "general account" showing the total financial transactions of the company for each year, is given in the following statement :

	1863-3.	1863-4.	1864-5.	1865-6.	1866-7.
Cash on hand April 1.....	118,643 28	\$343,015 81	\$3 0,410 10	\$163,445 42	\$407,051 99
Mortgage b'ds sold.....	110,000 00				
Materials on hand.....	82,258 03	90,515 17	222,247 12	\$62,321 98	232,995 41
Allotted stock.....				1,001,025 00	980,000 00
Inc. of acc'ts payable.....	78,276 45	80,330 55	11,499 12		117,260 40
Land sold.....			150 00		
Earnings less exp.	454,096 19	720,469 33	622,596 35	683,436 25	704,816 47
Total.....	894,973 95	1,138,332 89	1,187,003 29	2,168,361 65	2,562,227 25

Per contra, as follows, viz. :

	1863-3.	1863-4.	1864-5.	1865-6.	1866-7.
Coupons.....	\$129,120 00	\$129,120 00	\$129,120 00	\$129,120 00	\$129,120 00
Loss "Canal R.R.".....	20,249 34	9,908 47	38,905 02	44,799 97	20,725 11
Dividends.....	260,100 00	276,500 00	234,897 00	144,869 00	530,000 00
Reduction of accounts payable.....				28,411 55	
Bonds, retired and purchased.....					980,000 00
Fractional shares on allotment.....				7,190 00	
Equipment (new).....	2,089 94	52,394 19	127,437 85	37,865 23	51,629 62
Real estate (purch'd).....					20,740 00
Schuyler f'd settlem.....				970,008 70	64,548 29
Railr'd (new works).....	133 66	12,493 61	7,895 01		21,265 54
Materials on hand.....	90,515 17	222,247 22	262,321 98	232,995 41	247,877 54
Cash on h'd Mar. 31.....	\$43,015 99	\$30,410 10	166,445 42	407,051 80	516,736 63
Total.....	844,213 95	1,138,332 89	1,187,003 29	2,168,361 65	2,562,227 25

The financial condition of the company, as shown on the general balance sheets at the close of each year, is exhibited in the following figures :

	1863-3.	1863-4.	1864-5.	1865-6.	1866-7.
Stock (100 shares).....	\$3,000,000 00	2,572,800 00	2,619,000 00	3,030,000 00	3,000,000 00
Bonds due Dec. 31, 1866.....	919,000 00	912,000 00	912,000 00	912,000 00	11,000 00
B'ds due Oct. 1, '75.....	1,088,000 00	1,088,000 00	1,088,000 00	1,088,000 00	1,088,000 00
Profit and loss.....	622,996 23	897,869 08	927,543 90	940,235 18	534,837 57
Accounts payable.....	181,887 14	211,047 69	422,196 81	140,755 26	226,048 60
Total.....	5,754,363 36	6,612,308 77	6,610,340 71	6,061,181 44	6,277,185 17

Against which are charged as follows, viz.:

Railroad, &c.....	4,643,823 84	4,656,436 45	4,664,102 46	4,658,303 46	4,677,811 00
Loss by Schuyler fraud.....		573,800 00	619,000 00	1,599,303 70	1,063,742 99
Equipment.....	712,493 85	764,977 84	932,365 19	970,230 41	1,081,673 09
Real estate (including leases).....	65,505 66	65,505 66	65,505 66	65,505 66	96,245 66
Permitted stock.....					48,900 00
Materials.....	90,515 17	222,347 23	363,321 98	388,998 41	247,024 59
Cash.....	343,015 84	330,410 19	106,448 42	407,061 80	516,736 05
Total.....	5,754,803 36	6,612,366 77	6,510,340 71	6,081,181 44	8,273,183 38

CINCINNATI, HAMILTON AND DAYTON RAILROAD.

The earnings and expense account of the Cincinnati, Hamilton and Dayton Railroad Company yearly for the last five years, ending March 31, gives the following results:

	1863-63.	1863-64.	1864-65.	1865-66.	1866-67.
Passenger earnings.....	\$348,593 20	\$457,163 85	\$546,810 15	\$546,666 09	\$457,665 26
Freight.....	446,638 03	520,758 46	614,944 53	748,678 38	787,001 15
Mail and express earnings.....	47,167 81	56,115 94	47,421 13	46,990 66	41,763 10
Rent of track, &c.....	27,386 66	83,668 69	80,328 56	30,521 34	62,923 49
Miscellaneous.....	7,323 67	10,733 63	2,443 25	.....	2,173 67
Gr's income.....	\$377,406 86	\$1,083,338 47	\$1,341,956 71	\$1,361,566 47	\$1,301,536 67
Oper'g exp's.....	390,946 61	554,507 12	733,628 93	839,376 95	847,594 10
	\$436,467 05	\$523,521 35	\$503,237 79	\$532,286 52	\$453,942 57

From which were disbursed the following, viz.:

Interest on bonds.....	\$32,601 66	\$33,380 00	\$112,169 75	\$112,164 50	\$123,151 83
Interest and exchange.....				1,875 80	29,127 66
Taxes.....	20,693 46	30,699 17	58,356 14	95,016 05	63,920 58
Insurance, &c.....		2,430 53	4,074 00	4,690 00	2,194 65
Ordinary disbursements.....	\$114,295 12	\$126,509 09	\$174,599 89	\$213,846 35	\$233,894 15
Extra'y disbursements.....	1,856 50	21,553 73	51,343 07	.....	65,780 00
Total p'd from earnings.....	\$116,653 62	\$148,063 71	\$225,941 96	\$213,846 35	\$299,114 15
Dividend fund.....	\$270,513 43	\$90,757 64	\$277,235 83	\$218,948 17	\$154,823 43
Dividend and tax.....	232,347 43	239,963 91	257,894 72	270,000 00	297,539 00

The financial condition of the company as exhibited on their balance sheet at the end of each year, (31st March,) is shown in the following statement:

	1863.	1864.	1865.	1866.	1867.
Capital stock.....	\$2,155,800 00	\$3,500,000 00	\$3,000,000 00	\$3,000,000 00	\$3,260,800 00
1st mort. bonds.....	284,000 00	284,000 00	379,000 00	379,000 00	9,000 00
2d ".....	960,000 00	1,250,000 00	1,250,000 00	1,250,000 00	1,250,000 00
3d ".....					600,000 00
Div. fund, surplus.....	242,723 75	284,517 48	493,123 59	547,076 76	404,577 18
Current accounts.....	264,668 89	477,747 53	430,350 31	437,000 05	242,435 44
Bills payable.....			44,412 07	383,000 00	522,734 96
Total.....	\$3,683,192 64	\$4,996,265 01	\$5,601,795 97	\$5,996,076 81	\$6,197,537 55

Against which are charged as follows, viz.:

	\$	\$	\$	\$	\$
Construction.....	2,648,306 38	2,364,049 43	2,897,229 06	2,920,786 13	2,980,423 36
Equipment.....	431,083 79	499,066 19	593,309 12	686,107 09	991,195 26
Real estate.....	285,581 54	303,869 98	244,551 10	288,123 60	242,883 09
Wood & materials.....	48,160 43	167,966 56	272,883 58	263,177 24	233,946 53
Wood lands.....		17,659 22	24,945 56	16,945 56	12,540 00
Bills receivable.....	44,601 14	118,348 32	17,847 32	24,153 24	31,696 70
Stocks and bonds.....	91,947 26	123,147 36	203,039 66	234,417 23	149,233 93
Accounts current.....	76,960 58	139,304 63	153,706 23	73,930 19	77,046 12
Dayton & Mich. RR.....			26,028 16	171,845 57	233,117 96
Cash & cash assets.....	811,532 53	253,243 33	90,084 84	97,814 97	112,254 61
Total.....	\$3,683,192 64	\$4,996,265 01	\$5,601,795 97	\$5,996,076 81	\$6,197,537 55

The actual nett earnings of this company in 1866-67 amounted to \$220,548 42, but from this was paid \$65,720 00 (discount on bonds issued) which left for dividends \$154,828 42. The dividends paid with tax thereon amounted to \$297,328 00, the difference (\$142,499 58) having been taken from accumulated earnings. It is evident from this that the road earnings were not sufficient to pay more than half the amount thus disbursed. The deficit in nett earnings is due, perhaps, to temporary causes, chief among which is the loss of freight from short crops, but also the increased rate of wages paid to employees. These difficulties time will remedy. But is it politic to pay dividends under such circumstances, and especially while increasing both the stock and bond accounts in the interest of connecting roads, which, at least for many years, will not return one half the interest on the outlay. We allude to the Atlantic and Great Western Railroad, and the leased roads with which this once flourishing company have become saddled. The large floating debt of the company is to be paid off by an issue of ten years 8 per cent. bonds.

MICHIGAN CENTRAL RAILROAD.

The fiscal year of this company ends May 31. The results of operations for the past five years read as follows :

	1863-63.	1863-64.	1864-65.	1865-66.	1866-67.
Passengers	\$399,629	\$1,263,415	\$1,771,814	\$2,061,235	\$1,524,225
(Av. p. pass. p. m. cents)	2:49	2:44½	2:59	2:73	2:40
Freight	1,963,737	2,073,974	2,383,539	2,303,523	2,325,222
(Av. p. ton p. m.) cents	1:99	2:35	2:08	2:30	2:40
Miscellaneous	73,121	93,859	140,076	176,563	215,743
Total gross earnings	\$2,946,580	\$3,431,248	\$4,145,419	\$4,446,490	\$4,055,190
Expenses	1,772,860	1,730,125	2,406,149	2,303,876	2,235,777
Net earnings	\$1,674,900	\$1,714,423	\$1,739,270	\$1,693,114	\$1,493,713
" per cent	56.83	49.93	41.96	38.4	34.64

The general income account, varying somewhat from the above figures, exhibits the total revenue and disbursements as in the following statement :

	1863-63.	1863-64.	1864-65.	1865-66.	1866-67.
Balance from previous years	\$312,194	\$773,636	\$1,002,894	\$703,385	\$603,028
Receipts from earnings	2,947,917	2,417,166	4,121,213	4,415,279	4,524,225
Total revenue	3,260,111	3,190,833	5,124,107	5,158,664	5,127,253

From which amounts were disbursed as follows, viz.

	1863.	1864.	1865.	1866.	1867.
Expenses	\$1,772,860	\$1,730,125	\$2,406,149	\$2,303,876	\$2,235,777
Sinking fund	84,500	84,500	84,500	84,500	84,500
Interest and exchange	617,637	600,317	632,691	643,736	622,051
Cash dividends—July	(3) 181,718	(5) 263,423	(19) 757,849	(4) 269,648	(5) 249,125
" —January	(5) 802,890	(5) 263,423	(6) 273,943	(5) 244,026	(5) 273,123
Stock dividend, July, 1865				(5) 269,473	
U. S. tax on dividends		21,752	60,925	65,720	26,225
" on receipts	22,835	33,469	93,290	112,281	60,508
Total disbursements	\$2,487,475	\$2,186,923	\$4,415,723	\$4,098,661	\$4,263,697
Balance to next year	\$772,636	\$1,002,894	\$703,385	\$450,803	\$463,600

The general balances are shown in the following accounts, as of May 31, yearly :

	1863.	1864.	1865.	1866.	1867.
Capital stock	\$3,057,426	\$3,315,206	\$3,491,826	\$3,922,867	\$3,970,706
Bonds	7,994,499	7,740,989	7,565,489	7,463,489	7,385,509
U. S. tax on coup.	4,958	5,435	153	58	4
Unpaid dividends	437	1,598	680	1,059	865
Jack'n, Leas'g & Saginaw R.R. Co.					263,423
Bills & sundries			15,424	279,915	
Balance of income	772,636	1,002,894	703,385	450,803	463,600
Total	\$14,834,955	\$15,068,329	\$14,781,570	\$15,183,190	\$15,017,543

Per contra the following are shown :

Construction, &c.	\$12,805,576	\$12,805,576	\$12,805,576	\$14,516,422	\$14,930,514
Materials	.....	.....	174,095	288,065	309,887
Cash, loans, &c.	654,735	807,841	294,608	75,750	333,660
Int. & N. Ind. R.R.	168,295	168,295	163,235	168,235	168,235
Stocks'n, Lane's & Sag'w bond ac't	.....	.....	.....	.....	8,065
Land accounts	.....	.....	214,173	125,911	122,086
As'ts in oth'r h'ds.	168,510	75,736	137,069	145,737	153,110
Bills & accounts	88,118	209,444	39,596	68,078	92,753
Total	\$14,934,955	\$15,065,823	\$14,781,570	\$15,183,190	\$16,017,543

THROUGH FREIGHT LINES.

That success should attend the establishment of great lines of transportation managed by a central directory could never be doubtful. That they have become a success, the semi-annual circular report of the business and earnings of the "Blue Line," which commenced business January 1, 1867 proves beyond cavil. This shows the following facts:

Freight moved East	40,050.94 tons.	Net earnings	\$701,064 81
West	26,281.26 tons.	"	491,638 44
Total	66,332.20 tons.	Total net earnings	\$1,192,703 25

The number of miles run was 8,800,856, and the number of tons carried one mile, 62,534,422, at an average rate of 1.92 cents per ton per mile. Proportion of freight East, 61.46, and West, 38.54 per cent.

The division of earnings was made as follows:

Hudson River railroad	80,828 11	Michigan Central railroad	\$305,616 47
New York Central railroad	283,980 05	Chicago, Burlington and Quincy railroad	4,129 29
Great Western (Can.) railroad	289,217 39	Chicago and Alton railroad	20,300 01
Boston and Worcester Western Railroad and others east of Albany	\$106,985 29	Illinois Central railroad	1,706 04
Total amount distributed			\$1,192,703 25

The number of regular "blue cars" now in the line is 402. The approaching fall and winter business, it is estimated, will require 1,500 to 2,000 cars for its accommodation.

COMMERCIAL CHRONICLE AND REVIEW.

Rates of Loans—Prices of Railroad Stocks—Stock Exchange—Prices of Governments—Course of Consols and American Securities at London—Import and Export of Coin and Bullion—Movement of Coin and Bullion—Course of Gold at New York—Course of Foreign Exchange at New York.

Business during July was characterized by the dulness which ordinarily prevails during that month. The most notable feature in trading circles was a decided improvement in confidence, inspired by the splendid crop prospects throughout the country, which, thus far have not been doomed to disappointment through the occurrence of unfavorable weather. This revival of hope, however, has not been attended with any exaggerated preparations for the fall trade. Merchants

appear to be governed by a strictly conservative feeling, and deem it prudent to wait for the demand rather than anticipate it. Manufacturers have probably made ample preparation for the Fall trade; and, apparently apprehending that there is danger of the markets being overstocked, some have curtailed their production during the latter half of the month. The jobbing trade has been cautious rather than sanguine; less, however, from any doubts of their being an active demand for goods than from a supposition that the markets may be over-supplied.

As the natural consequence of the general quiet in trade, money has been very abundant, and speculation in Wall street active. The banks have had large idle balances, and the rate of interest on demand loans has ranged at 4@5 per cent., and during the last week of the month balances were loaned at 3 per cent.

The following are the rates of loans and discounts for the month of July:

RATES OF LOANS AND DISCOUNTS.

	July 5.	July 12.	July 19.	July 26.
Call loans	4 @ 6	4 @ 5	4 @ 5	4 @ 5
Loans on Bonds and Mortgage	6 @ 7	6 @ 7	6 @ 7	6 @ 7
A 1, endorsed bills, 2 mos	8 @ 7	6 @ 7	6 @ 7	6 @ 7
Good endorsed bills, 3 & 4 mos	7 @ 8	7 @ 8	7 @ 8	7 @ 8
“ “ single names	9 @ 10	9 @ 10	9 @ 10	9 @ 10
Lower grades	11 @ 15	11 @ 15	11 @ 15	11 @ 15

A protracted depression in railroad stocks succeeded by the prospects of unusually large grain freights, had prepared the market for a brisk upward movement, and the dealers entered upon the “summer campaign” with an unusual unanimity of view as to the upward tendency of values, and the result has been a much more rapid advance than was realized within the same period last year. The following comparison shows the prices of stocks at the close of July, 1866 and 1867:

	July 26, 1866.	July 20, 1867.		July 26, 1866.	July 20, 1867.
N. Y. Central	104½	108½	Cincinnati & Pittsburg	84½	93½
Eric.	64½	78½	North Western	26½	50½
Hudson River	190	190½	“ “ pref.	64½	71½
Reading	111½	107½	Rock Island	90½	108½
Michigan Southern	88½	81½	Fort Wayne	101½	106½

The aggregate transactions in stocks at both boards during the month were 2,240,991 shares, against 1,577,646 shares in July last year. The total sales from January 1 to the close of July are 13,580,850, which is about 10,000 shares less than for the same period last year.

The following table shows the volume of shares sold at the New York Stock Exchange and the open Board of Brokers in the two first quarters and the first half of the current year, in the month of July and since January 1:

VOLUME OF SHARES SOLD AT THE STOCK BOARDS, JULY, 1867.

	1st Quarter.	2d Quarter.	Half year.	July.	Since Jan. 1.
Bank shares	7,815	11,153	18,968	4,764	25,732
Railroad “	5,079,773	4,910,853	9,990,626	1,868,124	11,878,350
Coal “	67,800	25,405	93,205	21,053	124,785
Mining “	133,857	91,189	215,045	63,110	278,155
Improv’d “	81,369	108,495	184,704	47,585	232,289
Telegraph “	117,573	153,118	271,091	109,630	380,721
Steamship “	223,653	215,873	444,526	53,128	503,654
Expr’s &c “	17,674	104,480	122,154	33,067	160,251
At New York Stock Ex.	2,073,406	2,074,851	4,148,757	900,541	5,048,998
At Open B’d	3,653,443	3,540,659	7,193,103	1,340,780	8,533,883
Total 1867	15,794,849	5,615,010	11,829,639	2,340,991	13,580,850
Total 1866	6,173,087	5,842,110	12,014,197	1,577,646	13,591,943

United States Securities were very firm and active throughout the month. The low rate of money has caused a steady home demand for investment; while the extreme ease in the London money market has encouraged a partial movement for shipment. The price of Five-twenties at London has varied but little, and as gold has risen over two points, bonds on this side have correspondingly advanced. Toward the close of the month the advance in prices appeared to have increased the number of sellers, and prices fell off from the previous high figures. The amount of Government bonds and notes, State and city bonds, and company bonds, sold at the New York Stock Exchange Board in the two first quarters and the first half of the current year, in the month of July and since January 1, is given in the statement which follows :

BONDS SOLD AT THE N. Y. STOCK EXCHANGE BOARD.

	1st quarter.	2d quarter.	Half-year.	July.	Since Jan. 1.
U. S. bonds.....	\$18,702,630	\$40,838,350	\$59,091,000	\$10,171,900	\$69,263,900
U. S. notes.....	4,792,480	3,877,600	8,140,080	4,170,000	12,710,660
St'e & city b'ds.....	8,894,100	7,601,650	16,485,750	3,683,000	20,168,750
Company b'ds.....	2,216,300	2,367,700	4,583,900	616,000	5,199,900
Total 1867.....	\$34,595,480	\$52,705,300	\$88,300,730	\$18,640,500	\$106,941,280
Total 1866.....	32,600,540	36,414,350	69,014,890	14,765,500	83,790,280

The great increase in the sale of bonds has taken place since the establishment of the Government Department of the Stock Exchange Board of Brokers.

The daily closing prices of the principal government securities are shown in the following statement :

PRICES OF GOVERNMENT SECURITIES AT NEW YORK, JULY, 1867.

Day of month.	6's, 1861. Coups.	Reg. 1862.	6's, (5-30 yrs.) 1863.	1864. 1865.	Coupon new.	5's, 10-40 yrs. 1867.	7-30's C'pn. 1867.
Monday 1.....	109%	109	110%	107%	107%	100%	106%
Tuesday 2.....	109	109	110%	107%	108%	100%	106%
Wednesday 3.....	109%	109%	110%	107%	108%	101%	106%
Thursday 4.....			(National Holiday)				
Friday 5.....	109%	111%	108%	108%	107%	103%	107%
Saturday 6.....		111%	108%	108%			107%
Sunday 7.....							
Monday 8.....	109%	109%	111%	109%	107%	103%	107%
Tuesday 9.....	110%	110	111%	109%	108%	103%	108%
Wednesday 10.....	110%	110%	111%	109%	108%	103%	108%
Thursday 11.....	110%	110%	111%	109%	108%	103%	108%
Friday 12.....	110%	110%	111%	109%	108%	103%	108%
Saturday 13.....		111%	109%	109%	108%	103%	108%
Sunday 14.....		111%	109%	109%	108%	103%	108%
Monday 15.....	110%	111%	109%	108	108	103	107%
Tuesday 16.....			109	109	108	103	
Wednesday 17.....	110	111%	109	109%	107%	103	107%
Thursday 18.....	110%	111%	108%	109%	107%	103	107%
Friday 19.....		110%	109%	109%	108	103	
Saturday 20.....					108%	103%	107%
Sunday 21.....							
Monday 22.....	110%	110%	111%	109%	108%	103%	107%
Tuesday 23.....	110%		109%	109%	108%	103%	108%
Wednesday 24.....	110%	110%	111%	109%	108%	103%	108
Thursday 25.....	110%		111%	109%	108%	103%	108
Friday 26.....		111%	109%	109%	108%	103%	107%
Saturday 27.....		111%	09%	109%	108%		
Sunday 28.....							
Monday 29.....	110%	110	111%	109%	108%	103	107%
Tuesday 30.....		111%	109%	109%	108%	103	
Wednesday 31.....	110%	110%	111%	109%	108%	103	
First.....	109%	109	110%	107%	106%	107%	106%
Lowest.....	109%	109	110%	107%	106%	107%	106%
Highest.....	110%	110%	112%	109%	108%	108%	108%
Range.....	1%	1%	1%	2%	2%	1%	2%
Latest.....	110	110	111	109	108	103	100

The quotations for three years compound interest notes on each Thursday of the month have been as shown in the following statement :

PRICES OF COMPOUND INTEREST NOTES AT NEW YORK, JULY, 1867.

Issue of	July 3.	July 11.	July 18.	July 25.	August 1.
July, 1864.....	119 @ 119½	119½ @ 119½	119 @ 119½	119 @ 119½	119½ @ 119½
August, 1864.....	118½ @ 119	118½ @ 119½	119 @ 119½	119 @ 119½	119½ @ 119½
October, 1864.....	117½ @ 118	117½ @ 118½	118 @ 118½	118½ @ 118½	118½ @ 118½
December, '64.....	117 @ 117½	117½ @ 117½	117½ @ 117½	117½ @ 117½	117½ @ 117½
May, 1865.....	116½ @ 116½	116½ @ 116½	116½ @ 116½	116½ @ 117½	116½ @ 117½
August, 1865.....	115½ @ 115½	115½ @ 115½	115½ @ 115½	115½ @ 115½	115½ @ 115½
September, '65.....	115 @ 115½	115 @ 115½	115 @ 115½	115 @ 115½	115 @ 115½
October, 1865.....	114½ @ 114½	114½ @ 114½	114½ @ 115½	114½ @ 115½	114½ @ 115½

The first series of figures represents the buying and the last the selling price, at first class brokers' offices.

The following are the closing quotations at the regular board on Friday of each of the last seven weeks.

	June 14.	June 21.	June 28.	July 5.	July 12.	July 19.	July 26.
Cumberland Coal.....	80½	80½	83½	83½	84½	86½	86½
Quicksilver.....	28	27½	81½	83	82½	84½	84½
Canton Co.....	.....	.....	47	.....	41	48½	52½
Mariposa pref.....	80	19½	31½	34½	28½	28½	.....
New York Central.....	101½	108½	104½	105½	105½	105½	109½
Erie.....	60½	59½	65½	68½	70½	71½	74½
Hudson River.....	108½	108½	109½	109½	110	1 6½	119½
Reading.....	106½	107½	109½	110	108½	104½	107½
Michigan Southern.....	68½	70½	78½	81½	79½	79½	83
Michigan Central.....	113	x.d.107	110½	.....	110	110	112½
Cleveland and Pittsburg.....	78½	77½	84½	86½	91½	91	91½
Cleveland and Toledo.....	118	120½	120	121½	119½	121	124½
Northwestern.....	34½	35½	42½	45½	44½	44½	48½
preferred.....	59½	59½	65½	67½	68	70½	72½
Rock Island.....	89½	90½	95½	97½	97	99½	104
Fort Wayne.....	97½	98	108½	100½	101½	101½	106½
Illinois Central.....	.....	120½	121½	123	.....	.....	119

The closing prices of Consols and certain American securities (viz. U. S. 6's 1862, Illinois Central and Erie shares and Atlantic and Great Western consolidated bonds) at London, on each day of the month of July, are shown in the following statement :

COURSE OF CONSOLS AND AMERICAN SECURITIES AT LONDON—JULY, 1867.

Date.	Cons for mon.	American U. S. 5-20s.	Ill. C. sh's.	Erie sh's.	A. & G. W.	Date.	Cons for mon.	American U. S. 5-20s.	Ill. C. sh's.	Erie sh's.	A. & G. W.
Monday 1.....	94½	73½	79½	43½	25	Sat'day 30.....	.....	(Holiday)	.....	.....	.....
Tues. 2.....	94½	73½	79½	43½	.....	Sunday 31.....	.....	.....	.....	.....	.....
Wedne. 3.....	94½	73½	79½	43½	.....	Monday 2.....	94½	73½	79½	43½	23½
Thurs. 4.....	94½	73½	79½	44½	.....	Tues. 23.....	94½	73½	79½	43½	23½
Friday 5.....	94½	73½	79½	44	.....	Wedne. 24.....	94½	73½	79½	47	24
Sat'day 6.....	94½	73	79½	43½	.....	Thurs. 25.....	94½	73½	79½	48½	25½
Sunday 7.....	.....	.....	.....	.....	.....	Friday 26.....	94	73½	79½	47½	26
Monday 8.....	94½	73	79½	44½	.....	Sat'day 27.....	98½	73½	79½	47½	26
Tues. 9.....	94½	73½	79½	43½	.....	Sunday 28.....	.....	.....	.....	.....	.....
Wedne. 10.....	94½	73½	80½	44½	.....	Monday 29.....	94	73½	79½	48½	26½
Thurs. 11.....	94½	73½	80½	45½	.....	Tues. 30.....	94	73½	79½	48½	23½
Friday 12.....	94½	73½	80½	45½	.....	Wed. 31.....	94	73½	77	48½	23
Sat'day 13.....	94½	73½	80½	45½	24						
Sunday 14.....	.....	.....	.....	.....	.....	
Monday 15.....	94½	73	80½	47	.....	Highest.....	94½	73½	80½	48½	25
Tues. 16.....	94½	73½	80½	46½	23	Lowest.....	98½	73½	76½	43½	23
Wedne. 17.....	94½	73½	80½	46½	23½	Range.....	1	74	4	5½	23
Thurs. 18.....	94½	73½	80½	46½	23	Lo.....	80	67½	73½	35½	23
Friday 19.....	94½	73½	80½	46½	23	Hi.....	96	70½	62½	46½	26
						Jan. 1.....	6	73½	10	10½	4

The lowest and highest quotations for U. S. 6's (5-20 years) of 1862 at Frankfurt in the weeks ending Thursday have been as follows :

July 4.	July 11.	July 18.	July 25.	Aug. 1.
71½ @ 77½	71½ @ 77½	77½ @ 77½	78½ @ 77½	78½ @ 76½

The import and export of coin and bullion at the port of New York in the two first quarters and the first half of the current year, and in the month of July; and the total since January 1, have been as shown in the following statement :

IMPORT AND EXPORT OF COIN AND BULLION.

	First Quarter.	Second quarter.	Half year.	Month of July.	Since Jan. 1.
Receipts from California.....	\$4,109,861	\$4,899,535	\$13,009,416	\$3,662,129	\$14,671,555
Import from foreign ports.....	409,077	1,147,619	1,556,696	64,291	1,631,087
Total receipts.....	\$4,518,938	\$6,047,174	\$14,566,112	\$3,726,420	\$16,302,642
Export to foreign ports.....	6,566,968	18,023,709	24,595,607	10,578,494	35,174,081
Excess of exports.....	\$43,020	\$9,981,535	\$10,029,555	\$7,851,904	\$17,881,449

The following statement shows the amount of receipts and exports in July and since January 1, for the last seven years :

	—California Receipts—		—Foreign Imports—		—Foreign Exports—	
	July.	Since Jan. 1.	July.	Since Jan. 1.	July.	Since Jan. 1.
1867.....	\$2,662,129	\$15,671,555	\$64,291	\$1,631,087	\$10,578,494	\$35,174,081
1866.....	6,764,969	32,175,014	345,961	1,556,147	5,821,459	51,638,569
1865.....	1,092,805	10,035,137	263,640	1,819,163	724,955	19,630,745
1864.....	711,645	6,584,316	125,053	1,555,095	1,947,339	31,099,450
1863.....	730,047	8,022,940	182,345	1,026,013	5,268,881	25,900,860
1862.....	1,991,469	13,943,585	29,001	770,556	8,669,237	36,084,683
1861.....	2,055,808	21,175,405	6,995,498	23,906,166	11,020	3,300,468

The course of the gold premium has been steadily upward, the price having advanced from 138 to 140½. The remittances of specie for the settlement of bankers' credits and on account of Erie and Illinois Central stock returned, as well as for United States coupons due July 1st, have been quite considerable, the total exports from New York for the month being \$14,301,702. The exports and receipts from customs duties together amount to \$24,096,106; while the receipts from California, from abroad, and from the payment of coin interest aggregate \$14,032,901. It thus appears that the withdrawals from the market for the month exceed the receipts by \$10,063,205; yet, at the close of the month, the amount of specie in the banks was \$969,098 more than at the beginning; showing that \$11,032,303 of gold was drawn from outside sources, a large proportion having doubtless been drawn from Washington, Philadelphia and Boston, being the proceeds of July coupons paid in those cities. From the statement below it will be seen that the withdrawals for the first seven months of the year exceed the supply from California and interest disbursements by \$47,370,818. This large deficiency has been made up chiefly from sales by the Treasury, overland receipts from the mines, and coupon disbursements by the Treasury at other cities forwarded here for sale. The following formula shows the details of the movement in the first two quarters and first half of the current year and in July, with the total movement since Jan. 1 :

GENERAL MOVEMENT OF COIN AND BULLION.

	1st quarter.	2d quarter.	Half year.	July.	Since Jan. 1.
In banks at commen't.....	\$13,185,223	\$8,522,609	\$13,185,223	\$7,433,996	\$13,185,223
Rec's from California.....	4,109,861	4,899,535	13,009,416	3,662,129	14,671,555
Imp's f'm for'n coun'ts.....	409,077	1,147,619	1,556,696	64,291	1,631,087
Coin interest paid by U. States.....	10,883,808	17,792,025	23,681,338	16,306,871	39,987,669
Total repo'd sup'y.....	\$20,542,468	\$24,862,806	\$26,868,669	\$21,901,397	\$70,415,563
Exp.'o for'n coun'ts.....	\$6,566,968	\$18,023,709	\$24,595,607	\$14,501,702	\$38,597,369
Customs duties.....	32,170,628	27,185,886	60,356,514	9,794,404	70,150,918
Total withdrawn.....	\$39,737,596	\$45,214,595	\$44,952,121	\$24,296,106	109,048,287
Excess of withdraw's.....	\$9,195,128	\$10,851,797	\$28,569,519	\$2,294,809	\$38,632,724
Specie in b'ks at close.....	8,522,609	7,768,996	7,768,996	8,733,094	8,733,094
Deficit made up from unreported sources.....	\$17,717,723	\$18,090,793	\$36,338,515	\$11,022,308	\$47,070, 8

The statement which follows shows the daily fluctuations in the price of American gold coin, as quoted at the Gold Room during the month of July :

COURSE OF GOLD AT NEW YORK, JULY, 1867.

Date.	Open'g.	Lowest.	High'at.	Closing.	Date.	Open'g.	Lowest.	High'at.	Closing.
Monday.....1.....	138½	138	138½	138½	Sunday.....21.....				
Tuesday.....2.....	138½	138	138½	138½	Monday.....22.....	140	139½	140	139½
Wednesday.....3.....	138½	138½	138½	138½	Tuesday.....23.....	140	139½	140	139½
Thursday.....4.....			(Holiday.)		Wednesday.....24.....	139½	139½	139½	139½
Friday.....5.....	138½	138½	139½	138½	Thursday.....25.....	139½	139½	139½	139½
Saturday.....6.....	139½	138½	139½	139	Friday.....26.....	139½	139½	139½	139½
Sunday.....7.....					Saturday.....27.....	139½	139½	140½	140
Monday.....8.....	139	138½	139	138½	Sunday.....28.....				
Tuesday.....9.....	138½	138½	138½	138½	Monday.....29.....	140½	140½	140½	140½
Wednesday.....10.....	138½	138½	138½	138½	Tuesday.....30.....	140½	140	140½	140½
Thursday.....11.....	138½	139½	140½	139½	Wednesday.....31.....	140	139½	140	140
Friday.....12.....	139½	139	139½	139½					
Saturday.....13.....	139½	139	139½	139½	June, 1867.....	139½	138	140½	140
Sunday.....14.....					" 1867.....	141	138½	140½	140
Monday.....15.....	139½	139½	139½	139½	" 1867.....	141	138½	140½	140
Tuesday.....16.....	139½	139½	140½	140½	" 1867.....	141	138½	140½	140
Wednesday.....17.....	139½	139½	140½	139½	" 1867.....	141	138½	140½	140
Thursday.....18.....	139½	139½	140½	139½	" 1867.....	141	138½	140½	140
Friday.....19.....	139½	139½	140½	139½	" 1867.....	141	138½	140½	140
Saturday.....20.....	139½	139½	140½	139½	Since Jan. 1, 1867.....	139½	139½	140½	140

Foreign exchanges have ruled firm at the specie shipping point throughout the month. The supply of commercial bills has been very light; a moderate amount of acceptances has been drawn against shipments of Five-twenties; but there has been a large deficiency, which has had to be made up by the shipment of specie. After midsummer the foreign bankers usually settle their European credits; but, although the remittances for that purpose have been large, an impression prevails that, owing to the very low rates of interest at London, a considerable amount of balances has been allowed to remain unsettled.

The following table shows the course of foreign exchange daily for the month :

COURSE OF FOREIGN EXCHANGE (60 DAYS)—AT NEW YORK.

Days.	London. cents for 54 pence.	Paris. centimes for dollar.	Amsterdam. forin.	Bremen. rix daler.	Hamburg. M. banco.	Berlin. cents for thaler.
1.....	109½ @ 110	517½ @ 518½	40½ @ 41½	78½ @ 79½	36 @ 36½	72 @ 73½
2.....	109½ @ 110	517½ @ 518½	40½ @ 41½	78½ @ 79½	36 @ 36½	72 @ 73½
3.....	109½ @ 110	518½ @ 519½	40½ @ 41½	78½ @ 79½	36 @ 36½	71½ @ 73½
4.....						
5.....	110 @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
6.....	110 @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
7.....						
8.....	110 @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
9.....	110 @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
10.....	110 @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
11.....	110 @ 110½	518½ @ 519½	40½ @ 41½	78½ @ 79½	36½ @ 36½	71½ @ 73
12.....	110½ @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
13.....	110 @ 110½	518½ @ 519½	40½ @ 41½	78½ @ 79½	36½ @ 36½	71½ @ 73
14.....						
15.....	110½ @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
16.....	110½ @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
17.....	110½ @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
18.....	110 @ 110½	518½ @ 519½	40½ @ 41½	78½ @ 79½	36½ @ 36½	71½ @ 73½
19.....	110½ @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
20.....	110 @ 110½	518½ @ 519½	40½ @ 41½	78½ @ 79½	36 @ 36½	71½ @ 73½
21.....						
22.....	110½ @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
23.....	110½ @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
24.....	110½ @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
25.....	110½ @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
26.....	110½ @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
27.....	110½ @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
28.....						
29.....	109½ @ 110	518 @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
30.....	110 @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½
31.....	110 @ 110½	518½ @ 519½	41½ @ 41½	79 @ 79½	36½ @ 36½	72½ @ 73½

Days	London.	Paris.	Amsterdam.	Bremen.	Hamburg.	Berlin.
July.....	109% @ 110%	517% @ 511%	40% @ 41%	78 @ 79%	86 @ 86%	71% @ 72%
June.....	109% @ 110%	518% @ 511%	40% @ 41%	78% @ 79%	86 @ 86%	71% @ 72%
May.....	109% @ 110%	530 @ 510	40% @ 41%	78% @ 80	86 @ 86%	71% @ 72%
Apr.....	108% @ 110 %	532% @ 512%	40% @ 41%	78% @ 79%	86% @ 86%	71% @ 72%
Mar.....	108 @ 109%	535 @ 515	40% @ 41%	78 @ 79%	86% @ 86%	71% @ 72%
Feb.....	108% @ 109	532% @ 515	40% @ 41%	78% @ 79%	86 @ 86%	71% @ 72%
Jan.....	108% @ 109%	530 @ 512%	41% @ 41%	78% @ 79%	86% @ 86%	71 @ 72%
Since Jan. 1.....	109 @ 110%	525 @ 510	40% @ 41%	78 @ 80	86% @ 86%	71% @ 72%

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

Quarterly Report of the New York City National Banks—Quarterly Report of the National Banks of Boston and Philadelphia—Monthly Range of sales of Bank Stocks—New York, Philadelphia and Boston Bank Returns.

The Comptroller of the Currency, Mr. Hulburd, has prepared with unusual promptitude the following abstract of quarterly reports of the National banking associations of the cities of New York, Philadelphia and Boston, showing their condition on the morning of the first Monday in July, 1867, before the commencement of business on that day. We add for comparison previous returns issued this year :

QUARTERLY REPORTS OF THE NEW YORK CITY NATIONAL BANKS.

Resources.

	January.	April.	July.
Loans and discounts.....	\$187,987,364 27	\$153,663,709 78	\$147,497,591 66
Overdrafts.....			128,567 83
Banking house.....	5,636,886 76	5,719,087 50	5,080,915 66
Other real estate.....			338,993 87
Furniture and fixtures.....			293,239 06
Current expenses.....	431,050 93	1,674,995 66	383,237 49
Premiums.....	637,324 70	941,100 98	1,178,143 56
Cash items (including revenue stamps).....	73,768,880 91	60,414,087 77	9,978,383 50
Exchanges for Clearing House A. M.....			94,378,523 73
Due from National banks.....	9,588,978 64	7,947,334 08	9,340,153 34
Due from other banks and bankers.....	4,186 978 64	2,689,888 88	2,968,285 04
U. S. bonds to secure circula'n.....	43,487,800 00	43,461,800 00	43,487,800 00
Other U. S. Securities to secure deposits.....	5,170,800 00	4,800,900 00	4,868,000 00
U. S. bonds and securities on hand.....	15,781,250 00	15,123,950 00	15,093,000 00
Other stocks, bonds & mortg's.....	4,634,510 86	6,360,118 78	6,230,048 21
Bills of National banks.....	2,228,268 00	1,429,115 00	3,070,538 00
Bills of other banks.....	69,488 00	69,699 00	45,758 00
Specie.....	10,547,117 80	5,718,732 80	6,084,306 43
Fractional currency.....	41,402,117 59	34,700,873 21	211,067 39
Legal tender notes.....			43,173,983 56
Compound interest notes.....	23,785,940 00	26,239,480 00	24,240,100 00
Aggregate.....	\$403,149,035 43	\$337,790,364 23	\$410,871,536 84

Liabilities.

Capital stock paid in.....	\$75,009,700 00	\$75,009,700 00	\$75,009,700 00
Surplus fund.....	17,573,506 87	17,801,440 86	17,796,351 98
National circulat'n outstanding.....	34,297,816 00	34,973,871 10	34,770,130 00
State bank notes outstanding.....	406,087 00	879,868 00	889,263 00
Individual deposits.....	301,963,194 16	176,493,039 91	316,188,740 21
United States deposits.....	2,319,414 34	2,759,835 75	3,008,080 86
Deposits of U. S. Disbursing Offices.....	4,684 47	996 70	996 70
Cashiers checks outstanding.....			1,477,223 73
Due to National Banks.....	53,466,859 23	51,841,553 59	46,704,362 26
Due to other banks and bankers.....	23,373,808 39	12,508,466 93	12,394,249 49
Profit and loss.....	4,870,196 37	7,491,207 43	6,391,785 10
Aggregate.....	\$403,149,035 43	\$377,790,364 23	\$410,871,536 84

QUARTERLY REPORTS OF THE NATIONAL BANKS OF BOSTON AND PHILADELPHIA.

Resources.

	Boston.		Philadelphia.	
	April.	July.	April.	July.
Loans and discounts.....	\$56,811,075 24	\$58,197,191 40	\$3,215,000 01	\$3,906,149 14
Overdrafts.....		1,476 49		6,676 33
Banking house.....	1,420,072 61	1,386,894 61	1,182,078 57	1,085,547 54
Other real estate.....		41,075 02		101,522 43
Furniture and fixtures.....				87,872 25
Current expenses.....	31,165 73	255,295 44	425,506 12	147,617 64
Premiums.....	55,145 35	67,760 88	395,847 33	404,888 72
Cash items (including revenue stamps) ..	4,516,821 66	387,895 07	1,032,735 19	350,923 22
Exchanges for clearing house, A. M.....		4,947,090 71		5,543,205 11
Due from National banks.....	8,458,871 88	7,019,988 93	4,805,130 79	4,547,280 44
Due from other banks and bankers.....	248,084 03	141,369 43	460,494 75	497,412 23
U. S. Bonds to secure circulation.....	29,044,350 00	29,044,350 00	13,118,000 00	13,118,000 00
Other U. S. Securities to secure deposits	1,925,000 00	1,900,000 00	2,047,600 00	2,222,200 00
U. S. bonds and securities on hand.....	3,947,550 00	4,033,500 00	3,283,580 00	3,053,700 00
Other stocks, bonds and mortgages.....	1,084,150 00	1,149,650 00	1,087,43 24	1,447,047 81
Bills of National banks.....	1,856,811 00	2,406,604 00	422,935 00	592,288 00
Bills of other banks.....	636,244 00	3,722 00	30,884 00	14,722 00
Specie.....	454,996 53	726,373 28	792,037 43	417,109 86
Fractional currency.....	6,063,097 49	108,479 84	8,410,263 24	144,207 40
Legal tender notes.....		6,633,512 00		9,160,799 00
Compound interest notes.....	11,531,180 00	9,381,980 00	8,348,470 00	7,302,980 00
Aggregate.....	\$127,804,735 51	\$129,119,097 59	\$3,045,537 33	\$3,683,534 05

Liabilities.

	\$	\$	\$	\$
Capital stock paid in.....	43,530,000 00	42,530,000 00	16,017,150 00	16,517,150 00
Surplus Fund.....	6,949,511 10	6,896,367 87	5,175,784 01	5,322,457 88
National circulation outstanding.....	25,309,509 00	25,221,746 00	11,006,790 00	11,004,241 00
State b'k notes outstand'g.....	811,268 00	223,304 00	133,065 00	125,185 00
Individual deposits.....	39,011,725 13	37,413,277 43	35,516,967 95	41,217,662 67
United States Deposits.....	1,465,594 19	2,312,219 49	1,837,404 12	1,644,923 20
Deposits of U. S. disbursing offices.....		31 80		411,980 54
Cashiers checks outst'd'g.....		101,799 61		
Due to National Banks.....	10,108,184 06	10,814,017 85	5,632,949 44	5,539,515 55
Due to other banks and bankers.....	1,550,696 50	1,044,185 24	974,533 93	952,987 87
Profit and loss.....	948,856 23	2,576,209 80	1,708,312 4	1,095,.....
Aggregate.....	\$127,804,735 51	\$129,119,097 59	\$3,045,537 33	\$3,683,534 05

The following table shows the monthly range of sales of bank stocks at the New York Exchange Board of Brokers for the first six months of the current year :

BANKS.	January.	February.	March.	April.	May.	June.
America.....	185-186	131-134		185-185	187-187	
Amer. Exchange.....	115-115	115-115	115-115	116-116	112-112	115-115
Butchers' & Drov.....	125-125					
Central.....	109-110	109-111	110-111	109-110	109-111	111-114
Chatham.....		140-140				
Commerce.....	110-115	112-114	113-116	112-115	114-119	112-114
Commonwealth.....	106-106	104-106	106-108	106-106		110-112
Continental.....	100-102	101-105	103-104	102-103	102-104	104-104
Corn Exchange.....			112-112	112-119		122-123
East River.....	100-100				100-100	100-100
Fourth.....	102-106	102-104	104-105	104-105	105-107	107-110
Hanover.....	102-102		110-110	112-112	115-117	113-113
Import. & Trade.....	112-112	112-113	112-113	109-110	110-111	111-113
Irving.....				104-104		
Leather Manufact.....					180-180	
Manhattan.....				135-135	135-135	
Market.....	125-125	125-125				
Mechanics.....	116-116	117-117		117-117	118-118	114-114
Mechan. B. Assoc.....	111-111	110-111		111-111		
Merchants.....	115-115		115-116	114-115	116-116	114-114
Merchants' Exch.....	108-108	105-105			107-107	110-110
Metropolitan.....	122-122	123-124	123-126	124-125	125-125	121-121
National (Gallatin).....	110-110	110-110			110-111	110-111
New York.....	116-116	117-118	118-118			
Ninth.....						115-115
North America.....	106-107	106-106		106-106	106-107	106-106

BANKS.	January.	February.	March.	April.	May.	June.
Ocean	1024-108	101-108	101-108	101-108	101-108	102-105
Oriental .....	.....	.....	180-180	.....	.....	.....
Park .....	.....	.....	.....	140-148	140-148	145-148
Phoenix	106-107	104-106	106-108	.....	105-106	106-108
Republic .....	.....	.....	114-114	114-115	115-115	115-116
St. Nicholas .....	.....	.....	.....	108-107	.....	.....
Seventh Ward .....	.....	.....	.....	.....	110-110	110-110
Shoe and Leather	110-112	112-112	112-112	111-112	115-111	110-112
State of New York	106-108	106-107	108-109	109-110	106-111	110-112
Tradesmen's .....	.....	.....	.....	.....	145-145	143-143
Union	112-110	115-116	.....	117-117	117-117	.....

Below we give the returns of the Banks of the three cities since Jan. 1 :

NEW YORK CITY BANK RETURNS.

Date.	Loans.	Specie.	Circulation.	Deposits.	Legal Tend's.	Ag. clear'gs
January 5	\$257,853,460	12,794,892	82,762,779	202,632,564	55,026,121	486,987,787
January 12	268,935,488	14,618,477	82,625,108	202,617,008	63,246,370	605,132,066
January 19	265,082,228	15,866,907	82,854,922	201,500,115	63,226,336	520,040,028
January 26	261,674,301	16,014,007	82,967,198	197,983,078	63,426,559	568,222,204
February 2	251,964,355	16,323,981	82,395,347	200,511,595	65,944,541	512-4-7,258
February 9	250,368,525	16,157,227	82,777,100	198,341,525	67,628,993	569,835,524
February 16	253,181,228	14,791,626	82,956,309	198,072,299	64,342,940	455,833,829
February 23	257,828,994	18,513,456	82,008,141	198,420,847	63,158,895	413,574,086
March 2	261,165,436	11,579,381	82,394,453	198,019,914	61,014,195	461,534,519
March 9	262,111,458	10,868,128	82,409,811	200,313,527	64,522,440	544,173,256
March 16	263,012,973	9,968,722	82,409,885	197,938,104	62,512,029	496,568,19
March 23	259,400,815	9,143,913	82,519,401	194,375,615	60,904,268	472,102,318
March 30	255,82,864	8,532,619	82,669,125	188,480,250	62,466,811	459,830,602
April 6	254,470,027	8,138,913	82,774,578	182,861,200	59,021,775	531,225,184
April 13	250,102,178	8,866,229	82,702,047	182,861,200	59,202,515	.....
April 20	247,561,781	7,622,535	82,648,571	184,090,256	64,096,916	.....
April 27	247,737,881	7,404,804	82,801,265	187,674,341	67,920,261	446,484,422
May 4	250,371,558	9,902,177	82,571,747	195,721,072	70,537,407	559,860,118
May 11	253,682,889	14,959,590	82,596,869	200,843,938	67,996,629	524,191,769
May 18	257,961,874	15,567,253	82,681,301	201,426,954	63,522,501	503,675,793
May 25	256,091,805	14,083,667	82,697,252	193,673,345	60,562,440	431,732,622
June 1	252,791,514	14,617,070	82,747,089	190,864,143	58,459,827	442,675,565
June 8	250,477,293	15,699,038	82,719,088	184,730,825	55,922,107	416,734,216
June 15	246,228,465	12,656,889	82,707,190	180,317,763	57,994,294	460,965,602
June 22	243,640,477	9,399,595	82,633,171	179,477,170	62,816,192	442,440,204
June 29	242,547,954	7,766,996	82,542,560	186,813,257	70,174,755	493,944,356
July 6	246,361,287	10,863,171	82,669,297	191,524,312	71,106,472	494,681,080
July 13	247,918,009	12,715,404	82,658,869	197,872,063	72,485,708	527,329,493
July 20	249,580,255	11,197,700	82,574,941	199,425,923	73,441,301	491,800,652
July 27	251,242,830	8,723,094	82,606,869	200,608,865	74,805,940	481,607,220

PHILADELPHIA BANK RETURNS.

Date.	Legal Tenders.	Loans.	Specie.	Circulation.	Deposits.
January 5	\$20,309,064	52,312,317	903,603	10,388,820	41,908,327
January 12	20,006,255	52,522,491	903,220	10,380,577	41,023,421
January 19	19,448,099	52,456,207	877,548	10,321,593	39,048,645
January 26	19,862,874	52,163,473	880,583	10,381,693	39,001,719
February 2	19,369,128	50,351,130	871,564	10,430,828	39,592,712
February 9	19,659,250	52,384,329	873,614	10,419,982	39,817,365
February 16	18,892,747	52,573,180	867,110	10,522,972	40,050,717
February 23	17,887,568	52,394,721	841,223	10,556,434	39,646,013
March 2	18,150,687	51,979,173	816,543	10,511,000	39,807,389
March 9	17,521,705	51,861,463	832,755	10,572,068	37,914,672
March 16	16,965,618	50,518,490	868,022	10,580,311	37,826,601
March 23	16,071,780	50,574,190	802,418	.....	34,511,545
March 30	15,866,948	50,880,306	602,149	.....	34,150,285
April 6	15,892,745	50,998,231	64,719	.....	32,796,595
April 13	16,188,407	51,293,776	646,625	.....	34,827,683
April 20	16,593,226	51,611,441	485,635	.....	32,820,580
April 27	16,737,001	51,890,939	282,817	.....	36,284,870
May 4	17,190,558	52,064,267	226,053	.....	37,371,064
May 11	17,273,919	52,474,383	408,763	.....	38,172,169
May 18	16,770,491	52,326,390	402,973	.....	37,778,782
May 25	16,019,180	52,536,170	392,133	.....	37,392,144
June 1	16,881,109	52,747,803	324,298	.....	37,232,614
June 8	16,580,720	52,158,194	346,615	.....	37,174,269
June 15	16,800,010	52,192,049	368,261	10,446,298	37,333,179
June 22	15,904,424	52,968,441	373,809	10,642,224	36,710,547
June 29	16,105,61	52,688,963	365,187	10,611,311	37,077,451
July 6	16,922,675	52,120,372	461,931	10,641,201	37,805,228
July 13	16,234,914	52,502,862	419,899	10,641,770	38,170,413
July 20	16,603,860	53,150,569	371,744	10,637,651	37,529,640
July 27 .....	.....	43,104,475	333,113	10,633,750	.....

BOSTON BANK RETURNS.

(Capital Jan. 1, 1866, \$41,900,000.)

	Loans.	Specie.	Legal Tenders.	Deposits.	Circulation—	
					National.	State.
January 7.....	\$97,000,773	1,183,451	17,033,837	40,834,618	34,590,307	513,664
January 14.....	93,411,773	1,334,800	16,839,35	40,348,316	34,997,446	311,749
January 21.....	95,393,932	1,073,160	16,59,99	38,679,004	34,375,163	301,911
January 28.....	97,891,329	1,053,399	18,816,481	39,319,341	34,716,597	302,296
February 4.....	97,742,461	956,569	16,394,604	39,703,053	34,691,075	302,014
February 11.....	97,264,163	873,396	1,103,479	39,474,359	34,698,663	302,606
February 18.....	96,949,473	929,940	15,893,333	38,900,540	34,765,430	303,606
February 25.....	95,33,900	779,493	15,741,046	37,693,963	34,953,005	303,296
March 4.....	95,031,727	953,897	15,9,8,103	38,316,573	34,675,767	301,439
March 11.....	92,073,975	695,447	15,719,479	38,713,053	34,643,631	168,568
March 18.....	93,159,446	563,94	16,970,979	36,751,733	34,809,533	303,133
March 5.....	92,061,060	516,184	16,557,905	36,751,735	34,733,733	293,991
April 1.....	91,723,317	423,113	17,12,433	37,056,833	34,843,575	303,635
April 8.....	91,079,519	453,751	16,960,418	37,253,775	34,851,533	293,011
April 15.....	91,712,414	376,343	16,815,355	37,313,535	34,333,819	297,365
April 22.....	92,472,816	343,719	16,549,596	38,307,543	34,853,300	293,701
April 29.....	92,333,022	339,851	16,936,564	37,387,099	34,81,437	294,363
May 6.....	92,671,149	529,378	16,571,736	38,731,769	34,734,323	293,806
May 13.....	92,423,114	517,597	16,553,431	38,504,761	34,804,993	293,514
May 20.....	92,633,537	507,806	16,499,319	37,674,853	34,833,469	293,491
May 27.....	92,233,677	441,073	16,833,361	37,133,061	34,807,860	293,951
June 3.....	92,691,925	571,536	17,173,301	37,0,6,894	34,735,794	279,275
June 10.....	93,436,167	493,787	16,767,854	36,033,716	34,804,153	293,796
June 17.....	93,725,123	511,095	15,719,795	36,039,933	34,771,778	271,043
June 24.....	92,151,163	470,544	15,753,396	36,531,129	34,793,347	297,394
July 1.....	93,996,703	617,456	16,055,141	37,475,337	34,737,38	293,353
July 8.....	94,747,778	915,493	15,055,466	38,251,040	34,801,533	293,494
July 15.....	95,046,468	833,466	15,397,873	38,640,481	34,771,633	294,323
July 22.....	95,096,51	650,303	15,437,635	38,333,615	34,744,291	293,666
July 29.....	95,594,314	361,873	15,543,401	38,543,723	34,633,743	294,344

CONTENTS FOR AUGUST.

NO.	PAGE.	NO.	PAGE.
1. Railway Extension and its Results.....	89	12. The Growth of our Capital and Investments.....	109
2. Debts and Taxation of our large Cities.....	107	13. Economy in Fuel.....	123
3. The Insurance Business for 1896.....	111	14. Typography and Type-setting machines at the Paris Exposition.....	104
4. Commercial Law, No. 35—Life Insurance.....	113	15. How Mexican Silver Mines are worked.....	143
5. New York City Government and Finances.....	120	16. Co-operative shipbuilding.....	149
6. Projected Railroad from Oswego to Niagara River.....	123	17. Russia, Prussia, Persia and India in Telegraphs.....	231
7. North China Trade.....	127	18. Egyptian Agriculture.....	129
8. Railroad Earnings for June and Second Quarter.....	131	19. The Railway Report of India.....	153
9. Debt of New Jersey.....	133	20. The Traffic in Ship Timber.....	154
10. Cleveland, Columbus and Cincinnati Railroad.....	134	21. Railroad Reports.....	155
11. India Railroads and the Cotton Trade.....	137	22. Commercial Chronicle and Review.....	159
		23. Journal of Banking, Currency, and Finance.....	165

The following advertisements appear in our advertising pages this month:

MERCANTILE.
 Little's Fire & Burglar-Proof Safes—196 B'way
 Lewis Andredried & Co.—110 Broadway—Anthracite and Bituminous Coal.
 A. B. Sands & Co.—129-141 William St.—Drugs
BAKERS AND BROTHERS.
 Duncan, Sherman & Co.—Cor. Pine & Nassau.
 L. P. Morton & Co.—30 Broad Street.
 Tenth National Bank—236 Broadway.
 Ninth National Bank—233 Broadway.
 Lockwood & Co.—94 Broadway.

Barstow, Eddy & Co.—25 Broad St.
 Gilmore, Dunlap & Co.—Cincinnati.
 DeWitt, Kittle & Co.—36 Wall St.
 Vermilye & Co.—44 Wall St.
 Eugene Kelly & Co.—35 Wall St.
 Simon De Visser—53 Exchange Place.
INSURANCE.
 New York Mutual Insurance Co.—51 William St.
 Fidelity Insurance Co.—17 Broadway.
 Marine—Great Western Insurance Co.
 Fire—Hope Fire Ins. Co.—43 Broadway.

THE MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

SEPTEMBER, 1867.

PROPOSED FINANCIAL POLICY OF NEW YORK CANAL ENLARGEMENT, ETC.

The Constitutional Convention of the State of New York, witnessed the somewhat extraordinary spectacle last week of receiving reports from two of their principal committees, adverse to each other. Of one of these, the Committee on Finance, Honorable Sanford E. Church, former Comptroller and Lieutenant-Governor, is Chairman; and of the other, the canals, Honorable Elbridge G. Lapham, of Canandaigua, is chairman. The subject about which the controversy has occurred is the enlargement of the trunk canals, and it will divide alike the Convention and the people of the State. Mr. Lapham believes that the exigencies of trade demand that as early as 1868 the Legislature should authorise the enlargement of a tier of locks and other incidental improvements on the Erie, the Oswego, and the Cayuga and Seneca Canals; while Mr. Church holds that they are ample for all the commerce which the West will have for them till 1882 at least. Another member of the Committee on Finance, Honorable Freeman Clarke, former Comptroller of the Currency, also made a report to the effect that there would never be further occasion for enlarging the canals, as the railroads were sure to perform all the additional transportation likely to be required. Amid these differences of the doctors the next two weeks of the Convention will probably be lively. Involving as the question does, the united interests of the State and its commercial metropolis, the decision should be carefully made.

Under the present Constitution, the revenues of the canals, after payment of the expenses of superintendence, collection and repairs, are to be devoted to liquidating the interest and redeeming the principal of the State debt, taking in turn the canal debt of 1846, the General Fund debt and the canal debt authorised in 1854. Any enlargement of the locks or of the bed of the canal must be paid for by direct taxation, in case it should be authorised by the Legislature before the extinction of these debts.

The Committee on Canals propose a revision of the organization of the Canal Department, abolishing the Canal Board, the Contracting Board, and the offices of State Engineer and Surveyor, Canal Commissioner and Canal Appraiser. The article which they have prepared establishes a Superintendent of Public Works, with five assistants; and continues the Auditor of the Canal Department. The Comptroller, Treasurer and Attorney-General are made Commissioners of the Canal Fund, and charged with the disposition of its revenues, and endowed with the power of appointments. The Auditor, Superintendent and Commissioners are empowered to fix the rates of toll, but are expressly restricted from reducing them till the present canal debts shall have been paid.

One great difficulty in understanding the subject of State finance has been the meshy system of funds which exists, making it almost impossible to distinguish one from another. Thus besides the general fund, the common school fund, the literature fund and the United States department fund, there are numerous sinking funds for the liquidation of debts incurred by the canals and lending Comptroller's bonds to railroad corporations. Both the committees have undertaken to simplify the matter by consolidating the obligations of the canal department and the sinking funds set apart to meet them. But they do not attempt to do so alike, as each committee was moving in a different direction, so that it will be necessary to scrutinize their suggestions carefully in order to understand them aright.

Mr. Lapham proposes to unite the following items of indebtedness, making of them one single "canal debt":

The Canal Stock Debt of 1846	\$2,285,000
The Canal Enlargement Debt of 1854	10,750,000
The Floating Debt Loan of 1859	1,700,000

The several sinking funds for the redemption of these debts are accordingly comprehended in one "canal debt sinking fund." The revenues of the canals, after paying the expenses of superintendence, collection and repairs, are to be placed in that sinking fund and appropriated annually by the Legislature as follows, namely:

1. To pay the interest and principal of the canal debt falling due during the year.
2. To pay the interest on the "general fund debt."
3. To pay the expense of completing the locks in the Champlain canal, not exceeding in the aggregate \$300,000, and to the payment of any existing debt for canal purposes, till all such debt shall be liquidated.
4. After complying with these conditions, the remainder of the sinking fund shall be annually appropriated to furnishing necessary supplies of water to the Erie canal, to enlarging bridges and aqueducts on the Erie,

the Oswego and on the Cayuga and Seneca canals, and for the construction of a tier of locks on those canals, capable of admitting boats 23 feet in breadth, 200 feet in length, and drawing 6 feet of water. This work to be begun in 1868 and completed as soon as the revenues will permit.

When the receipts of revenue from tolls shall not be sufficient to make these specified payments, the deficiency shall be made up by borrowing; and in case of failure to realize a sufficient amount in this manner, the Legislature is required to make provision. After the payment of the "canal debt," the moneys in the sinking fund, as soon as sufficient sums shall have been accumulated for that purpose, shall be applied to redeem the principal of the "general fund debt," \$5,642,622 22. When this shall have been accomplished, the surplus revenues of the canals shall be employed to refund to the State Treasury the "contributions" or advances made to the canals since 1846, the principal and interest of which now amount to \$18,007,289 68, as required by article 7, section 5, of the present constitution.

Governor Church's report classifies the entire obligations of the canals as follows, namely:

The canal debt of 1866	\$3,258,000 00
The floating canal debt, newly called the "General Fund Debt"	5,642,622 22
The canal debt under the constitutional amendment of 1854	10,807,000 00
The floating canal debt of 1866	1,700,000 00
Advances to the canals since 1846	18,007,289 68
Aggregate	\$39,414,911 90

Of this aggregate \$21,407,682 22 are due to the creditors of the State, and the remainder, being for amounts levied upon the people by direct tax, is made, as shown before, by the present Constitution, a debt of the canals to the Treasury of the State. The remaining obligations consist of \$26,944,000 of "bounty debt," and \$218,000 of contingent indebtedness, chiefly incurred by lending the credit of the State.

The Committee on Finance accordingly propose to constitute all the obligations to the redemption of which the revenues of the canals are pledged, a single "canal debt." To meet it, there will be in the general sinking funds on the 1st of October next \$2,788,505, leaving a net indebtedness of \$18,652,177. They provide that after paying the expenses of collection, superintendence and repairs of the canals, there shall be set apart on the 1st day of October of each year the whole of the remaining revenue from tolls, as a sinking fund to pay the interest and redeem the principal of the debt as it shall fall due, till the entire canal indebtedness shall be extinguished. They fix the same time as contemplated by the present Constitution, the 1st day of October, 1878. Whenever in any year, these net or surplus revenues shall not reach \$2,418,000, there shall be a direct tax levied on the people of the State to make up the deficiency, unless the receipts of the preceding years shall have sufficiently exceeded that amount to accomplish the same thing.

The outstanding canal debt having been thus extinguished, the surplus revenues are set apart to repay the "advances" drawn from the people by taxation for canal purposes since 1846; of which the principal is \$14,396,767 97, and the interest now arising \$3,610,621 71—making a total of \$18,007,289 68. The Committee propose to apply this amount to the payment of the principal and interest of the bounty debt, pro.

viding, also, that the tax required annually for the bounty debt sinking fund shall be correspondingly reduced.

This will postpone all enlargement of the canals till the period when the State debt shall have been liquidated, unless there shall be a special authorization by the people. The new article proposed by the Committee expressly prohibits any tax for the purpose except on that condition. It even forbids grants or loans to railroad and other corporations, and to hospitals, orphan asylums, and other enterprises, and continues the limitations of the present Constitution to the incurring of indebtedness. The building of the new Capitol is put off ten years.

As to the wisdom of all these restrictions, we would suggest whether there is not danger in making a constitution too particular in its provisions. It is not in the nature of our institutions to have a fundamental law which prevents any change of policy. The public may not consider it wise now to enlarge our canals, or to build a Capitol, &c., but sometime hence they may desire the privilege, and that without going through the difficulties and delays of framing a new instrument or even amending the old one. We cannot believe, therefore, that the people are ready to approve of these cast-iron restrictions.

In respect to the necessity of enlargement Mr. Church's arguments are entitled to careful consideration. The last effort of the State in that direction costing \$39,425,534 32, and occupying thirty years, has just been completed. It has secured a water-way of seventy feet by nine, capable of carrying boats of 250 tons burthen. Judging from past experience Mr. Church supposes that the expenditure would be twice (\$12,000,000) the estimated amount; especially as labor and materials are extravagantly dear. Besides the enlargement of the locks will probably necessitate an enlargement of the water-way, as well as a change of other structures, and so incur millions more of debt and expenditure. This certainly is a very weighty consideration. Whether it is wise, with our present heavy burthens, to incur others so large and indefinite in amount is matter for serious thought. But the report argues against the necessity of the enlargement by declaring that the capacity of the Erie Canal has never yet been reached or even approached. Four millions of tons, it tells us, can be transported over it in each direction every season; yet the utmost was in 1863, when the Mississippi river was blockaded, and only 2,816,094 tons were carried. Those navigating the canal complain often of bad repair but not of want of capacity; and the committee think that better management and not greater capacity is now required. They quote the present State Engineer and Surveyor, Mr. J. P. Goodsell, also Van Rensselaer Richmond, and other engineers to show that the entire capacity of the Erie Canal will not be required before 1882.

We must take exception to this conclusion of the Committee of Finance. It has never been insisted that the canal would not transport with ease all the freight offered, provided it would be offered in turn through the season. But forwarders do not do business in that way. In the months when business is dull they desire to move forward little or no freight, and the boats are comparatively idle. But in other months, especially in Autumn, after the harvests have been gathered, there comes a perfect deluge of business, and if the capacity of the canal is at

that time insufficient, it is as bad for all practical purposes as though such was the condition the entire year. Then, too, there will be more business for our canals if it can be done cheaper. The idea of the enlargement is to enable freight to be carried through without breaking bulk. If this is done the expense of transportation will be lessened, and, therefore, large quantities of corn, &c., that now are never sent to market, will be pushed forward and the amount of freight increased. So also much that is at present carried by railroads would return to the canals for the same reason. And if the enlargement permits of steam being used, this increase of freight would be more rapid and decided.

The next position that Mr. Church assumes is that a further enlargement would not cheapen transportation. The present rates of tonnage are less than half the prices on the railroads. Nearly one-third of these rates consists of the tolls levied by the State. If the canal debt should be increased, the present toll-sheet must be maintained; whereas, if the debt shall be paid, the tolls could be reduced to a nominal amount, barely sufficient to keep the canals in repair. This would enable the prices of transportation to be lessened in proportion. "Freedom from debt and comparative freedom from tolls constitute a policy which the State should permanently adopt in reference to the canals, and from which it should never have departed." Here, again, it appears to us the reasoning is partial. As to what the former policy of the State should have been it is not pertinent to consider. But it is apparent that if the locks of the trunk canals should be enlarged to the dimensions contemplated, vessels capable of navigating the lakes and Hudson River could be passed, as we have intimated above, from the one to the other, without breaking bulk. If this should be achieved, there would be a large deduction to be made from the cost of transportation, besides the advantage of the time gained over the present mode. Then, again, as we stated above, if the proposed enlargement should enable steam also to be employed in navigation, there would be a still further saving of time and reduction of the cost of transportation. The drawback occasioned by keeping up the tolls would thus be more than balanced.

But the finance committee build their chief argument on the consideration that the present liabilities of the State amount to \$48,351,682 22, and those of the cities, towns and counties to \$85,000,000, while New York is also obligated to pay at least \$500,000,000 of the national debt and probably as much more of unascertained indebtedness. In addition is the present enormous taxation. The State tax is \$12,500,000; town and county taxes, \$32,000,000, and city taxes, \$18,000,000—total, \$62,800,000. To meet all this the State has but about \$20,000 net revenue from the Salt Springs and the auction duties, which last year reached \$269,729. The remainder must be paid by direct taxation.

This we conceive is an argument of great weight, and yet at the same time we should remember that much of the State and local taxation is for the very purpose of paying off debts. One-third of the State burden is so employed, and the counties and towns for two or three years past have been reducing their war bonds. A few years more will remove all these, and if no new obligations shall be incurred, the State and the great majority of cities, towns and counties will be out of debt in 1878. Wiser counsels will also be required at the Federal capital, so that there is a silver lining to the cloud.

Then we should always be careful not to push economy and caution so far as to tie our hands from helping ourselves. If the State of New York is actually sustaining a crushing weight of public liabilities, she should obtain every aid in her reach. Her wealth is due in a vast degree to her extensive commerce. It becomes of the most vital importance to extend that commerce. No unnecessary obstacle should be imposed. She has embarked in a canal policy, and should now make that policy as beneficial as possible, as in that way she can increase the power of her citizens to endure taxation. The outlay of a few millions, more or less, will not signify much in the long run. A generous and enterprising policy will secure to the State the trade of the West clear to the Pacific. The State, her counties and municipalities can weather the storm, without bankruptcy, if they are enabled to put forth every energy.

We have not space to examine these reports further. It seems, however, evident to us that the policy of turning our backs on enlargement, and incorporating into our constitution stringent and particular provisions against it, is unwise. Nor would we place into that instrument the opposite view. Leave the question open so that we can take advantage of future developments. Perhaps a freight railroad can be built that can do the business cheaper and better than canals. In that case no enlargement or ship canal will be necessary. One thing, however, is we think certain, the West is entitled to as cheap a transit to the seaboard as capital is able to give. If we have determined not to sell our canals, it will not do for us to say positively we will neither enlarge them or permit private enterprise to furnish cheaper avenues through the State which will compete with them.

RAILROAD PROGRESS IN THE SOUTH.

While all eyes are anxiously turned towards the South, wishing for that day when political union shall again be perfected and its blessings realized, it becomes of special importance to know whether any, and if so what, industrial progress is being made in that section of the country. Reconstruction, to be of much value, must begin with or find its chief support in a revival of business enterprise. Hence no better indication of the progress towards an effective re-union can be desired than is furnished in the rapid railroad development now taking place in many of the Southern States.

When the civil war arrested progress in Southern railroads, there were 10,082 miles of road building or actually completed in the fourteen slave holding States. On the 1st of January last there were 16,742 miles in progress or completed in those States, and at the present time there are nearly five thousand miles of road in course of construction, the completion of which is pushed forward with an energy that is only limited by the supply of capital. Many of the new lines are of great importance, and constitute new trunk roads for the establishment of direct communication between remote and important sections of country, or else they form branch lines in connection with old established roads.

Perhaps the most extensive of these new enterprises are in Texas. Since the close of the war, great activity has been manifested in this particular in that State, and at present there are within its limits not less than 1,200 miles of road in process of construction. Some of these new lines are of great importance, and will open up the resources of the richest part of the State to commerce. The Texas Central, to be finished probably in 1868, traverses a rich wheat growing region, and will ultimately connect with the Indian nation—soon to be opened to civilization—with Kansas and with the Great Pacific line to California. Branch lines are to be built to Galveston and Houston, and thence to New Orleans, thus bringing the almost boundless resources of the interior of Texas within reach of the Gulf ports. It is also in contemplation to construct a ship canal from Houston to Galveston Bay. The route has been already surveyed, and it is estimated that a canal 100 feet wide and 12 feet deep can be constructed at a cost of \$750,000 in specie. This will provide a much needed outlet to the sea for the commerce of the interior of Texas, and its completion will soon be a commercial necessity, owing to the rapid development of the State.

Next to Texas, the most important railroad enterprises occur probably in Virginia. This State has been foremost in all works of internal improvement since the war, and considering the limited resources and credit at her disposal, it must be admitted that immense progress has been made. Last week the Virginia Central Railroad was opened to Covington, where it connects with the Covington and Ohio Railroad; the first step towards uniting Louisville and Cincinnati with Richmond and Norfolk. This is a most important work on account of the connecting links that will bring so large a portion of the natural resources of Virginia within reach of both a home and a foreign market—for the establishment of a direct line of steamships between Norfolk and Europe is an important event of recent Virginia development. A portion of this same line is that contemplated between the Kanawha region and Richmond. The Virginia legislature at its last session granted a charter to a company for the construction of this road, which has been contracted for and will soon be commenced. It is intended to tap a region abounding in iron, lead, salt, coal, manganese and other minerals, and bring these products to a market. Virginia is richer than Pennsylvania in natural wealth, and the development of this region is one of the important features of progress in that state.

The Chesapeake and Ohio Railroad, which is a consolidation of these lines designed to connect the commerce of the Ohio and Mississippi with tide water is one of the grandest schemes ever contemplated for the industrial development of Virginia. The city of Richmond has subscribed \$2,000,000 towards the execution of the work. The people of Augusta County are about to vote on a proposition to aid it by an appropriation of \$500,000. Other counties and cities in the State have already taken stock to the amount of \$3,000,000, and it looks as if the work would be completed by capital raised exclusively in that State. The extension of the James River canal to the Ohio—thus affording water communication between the west and the seaboard—is also a project of kindred importance. This was an enterprise that attracted the attention of Washington, and was

urged by him with great energy as a commercial necessity for the State. But inaction at that time left the prize to be carried off by New York through the construction of the Erie Canal. At present, however, there is a fair probability of the work being completed, as the existing Virginia canal, of which the proposed line is an extension, has fallen into the hands of a French company which, it is said, intends to prosecute the work without delay, as soon as its charter shall have been fully confirmed.

These Virginia railroad and canal enterprises, although of the highest importance on account of their influence in developing the resources of the country, are only subsidiary to a still grander project that is intended to divert to Richmond a portion of the commerce of the Pacific. Richmond has now direct communication with Memphis. The Railroad from Memphis to Little Rock, Arkansas, will be finished within a few months. A Texas company has undertaken the work of building a road that will unite Northern Texas and the Rio Grande with Arkansas. General Fremont is now pushing a railroad through the Mexican provinces of Chihuahua and Sonora, that will connect the Rio Grande and the James River *via* Little Rock and Memphis, with Guaymas, in California: hence, before the expiration of another year it is expected that Richmond will be in direct railroad communication with San Francisco.

The railroad and canal improvements in the other Southern States are also of considerable importance. In Alabama recent arrangements have connected the Will's Valley and Chattanooga Railroad into the Chattanooga and New Orleans line. This road will be completed to the Alabama State line in October next, and the cars will be running to Gadsden within eight months. A short link of thirty miles—which is now being graded—will then connect Selma with Chattanooga. This road will open up the grain lands of Alabama to the great Northern and Western markets, and will impart new energy and industry to one of the finest sections of country in the Union. The Charleston, Atlanta, Memphis, Topeka, and the New Orleans and Chattanooga railroads will all cross the Coosa River near Gadsden, and that place will then become, next to Atlanta, the most important railroad centre in the interior of the Southwestern States. Louisville and Cincinnati are competing for the commerce of the Gulf States, and the capital of these wealthy cities has been available in improving and perfecting the communications with Mobile, Vicksburg and New Orleans. Nearly all the Southern cities are taking measures to extend their railroad communications with the interior. Savannah was almost the first to put in order its old roads and plan new connections. Charleston has evinced a decided activity in the matter, and is once more in direct railroad communication with the Mississippi River at Memphis. In a word, from almost every seaport along the Southern coast connections are being effected with one or another of the leading trunk lines that compose the admirable net work of Southern railroads. North Carolina seems to be the most backward, but the project of repairing the Dismal Swamp Canal, which will probably be soon completed, will open that State to a new career of industry and wealth.

Our limits preclude us from presenting in detail all of even the larger

roads projected, and much less can we make room to describe the numerous shorter enterprises in progress in the Southern States. Enough has been given to indicate that the Southern people manifest an energy and interest upon the subject, that could scarcely have been anticipated at the close of a long and exhausting civil war. They have been greatly aided in the work of industrial reorganization by the liberality and wisdom of the Government in restoring the military railroads at the close of the war to the original owners on payment of a fair valuation for improvements in the roads and the rolling stock. Indeed, it is not easy to see how any progress could have been made in case a different policy had been adopted by the authorities at Washington.

The vigor thus manifested at the South in opening these great lines of Southern trade is also very important, in that it facilitates the restoration of society to a healthy condition, and thus affords effective guarantees for the future. With the establishment of easy intercourse with distant markets, the vexed labor problem was divested of half its difficulties. To all classes the one resort of industry was the only possibility of the future. In this view, the restoration and improvement of the great highways of modern travel is invested with a grand significance. It has smoothed past troubles and will lead to still higher benefits. Politics and government are dependent upon and controlled by the social and industrial condition. All that is now required is confidence and security, and when these shall have been obtained, the South will enter upon a new career of prosperity.

DEBT AND FINANCES OF LOUISVILLE.

The public debt of Louisville is made up of what is called the Debt Proper and the Contingent Debt—the latter being loans of the city's credit to certain Railroad Companies. The following is a schedule of the Debt Proper :

FUNDED DEBT, JANUARY 1, 1867.

Date of Bonds.	For what pur- issued.	Time When to run. due.	Where payable.	—Bonds— iss'd.out.	Amount of bonds.
July 21, '88.	L. Gas Comp'y.	30 y'rs. 1868.	L. Gas Co.'s office.	100 .24	\$34,000 00
Feb. 21, '88.	Wharf Property.	1868	Manh. bank, N.Y.	81 .86	26,000 00
Apr. 20, '83.	Jeffers. wh. st'k	" 1863.	Mercantile bk, N.Y.	60 .60	60,000 00
Jan. 1, '63.	School Houses.	" 1863	" "	75 .75	75,000 00
Apr. 1, '53.	L. & N. RR. st'k	" 1863.	" "	500 .49	498,000 00
Mar. 15, '64.	Trader Wharf.	" 1864.	" "	175 .171	171,000 00
Oct. 15, '64.	School Houses.	" 1864.	" "	18 .6	18,000 00
May 15, '67.	Water Works.	" 1867.	B. of America, N.Y.	673 .673	67,000 00
May 15, '69.	"	" 1869	" "	294 .279	279,000 00
Oct. 17, '68.	Wharf Property.	" 1868.	Mercantile bk, N.Y.	10 .10	10,000 00
Feb. 2, '68.	"	" 1868.	" "	15 .10	10,000 00
Feb. 17, '65.	Bounty fund.	20 y'rs. 1885.	Treasurer's office.	100 .87	87,000 00
Mar. 1, '65.	"	" 10 y'rs. 1875.	" "	100 .91	91,000 00
June 10, '65.	School Houses.	20 y'rs. 1865.	" "	120 .120	12,000 00
Mar. 25, '66.	Cabel Street.	" 1866.	" "	342 .342	34,747 94
Apr. 10, '66.	School Houses.	30 y'rs. 1896.	" "	80 .80	80,000 00
Apr. 25, '66.	Streets.	" 1896.	" "	324 .324	32,500 00
Sept. 15, '66.	"	" 1896.	" "	214 .214	21,500 00
Oct. 1, '66.	"	" 1896.	" "	40 .40	40,000 00
Dec. 15, '66.	"	" 1896.	" "	40 .40	40,000 00

Total number and amount of bonds. 2400 2351 2,351,747 94
 Bonds authorized, but not yet issued. 60,000 00

The bonds issued as loans of the City's credit, forming the contingent debt (being endorsements) are described in the following statement:

CONTINGENT DEBT JANUARY, 1, 1867.

Date of bonds.	For the benefit of what RR. issued.	Time to run.	When due.	Where payable.	Bonds—Iss'd Out.	Amount of bonds.
Ap. 20, '53.....	Jeffers-ville RR.	30 y's	1883.....	Bank of	2 0 150	\$150,000 00
Ap. 1, '56.....	Lou'vil. & Nas. RR	"	1886.....	America	500 471	471,000 00
Oct. 1, '62.....	"	"	1886.....	N. Y.	250 234	234,000 00
Ap. 1, '57.....	"	"	1887.....	"	250 205	205,000 00
May 1, '58.....	Lebanon Bran. RR.	"	1886.....	"	90 80	9,000 00
Nov. 1, '56.....	"	"	1886.....	"	125 125	125,000 00
Oct. 16, '63.....	Leb. Br. Exten. RR	"	1898.....	"	600 600	600,000 00
Total number and amount of bonds.....						2,085 1,575 \$1,575,000 00

As collaterals for the security of the principal and interest of these endorsements the city holds the bonds of the corporate beneficiaries, secured by deposits of stocks or mortgage on their properties. The whole of the debt bears interest at the rate of 6 per cent. per annum, payable semi-annually at the banks named in the tables or at the City Treasurer's office. As against its debt proper, the city holds property of great value—in endorsements, real estate (\$2,125,520 67), market-house property (\$48,344 96), stocks of various companies (\$1,549,258 70), House of Refuge Property (\$81,191 77), notes, personal debts, &c.

The valuation of taxable property, as a basis for the taxes to be collected in 1867, was—for city tax \$48,561,983, and for water tax \$57,823,727, the latter including the value of merchandize (\$9,261,744) not taxable for city purposes. The valuation for the years 1860 to 1867, both for city and special purposes, is given in the following table:

Fiscal years.	Land & improvements.	Slaves.	Car'ges.	Per's'y.	Total for city tax.	Slaves, mdse, for city.	Personal-ty, Resid-uary.	Total for RR, water, &c. tax.
1861.....	\$24,883,832	\$1,263,250	\$54,525	.....	\$26,201,107	\$2,364,945	\$24,836,162	\$24,836,162
1862.....	19,798,087	798,900	41,855	.....	19,649,392	4,151,487	\$23,790,779	\$23,790,779
1863.....	22,725,190	794,750	46,295	.....	23,551,171	7,088,289	\$20,462,882	\$20,462,882
1864.....	30,540,717	598,600	55,595	.....	31,194,913	10,060,805	41,255,718	41,255,718
1865.....	36,012,484	.....	89,075	.....	36,101,509	13,563,198	51,664,707	51,664,707
1866.....	46,194,387	.....	99,675	\$512,330	53,285,492	9,983,225	63,268,717	63,268,717
1867.....	47,927,068	.....	84,080	550,855	48,561,983	9,261,744	57,823,727	57,823,727

The assessment law appears to have been modified between 1865 and 1866, and "personality," formerly only taxable for water purposes, was transferred to the city valuation. Under the head of "Residuary" there was formerly from \$3,000,000 to \$6,000,000 listed as liable to water, &c., tax; also an additional slave valuation. These items, no longer existing, made a larger difference between the two lists than is at present observable—that difference being for the years 1866 and 1867 "merchandize" alone.

The following statement shows the amount of taxes collected for 1866, and the purposes for which collected:

City tax.....	\$471,400 48	Old liability tax.....	\$26,554 80
School tax.....	101,671 94	Cabel street tax.....	15 80
Gas tax.....	23,953 70		
Loan tax.....	19,064 47	Total city.....	\$723,479 23
Bounty, bond, &c., tax.....	23,064 07	Water tax.....	50,299 55
House of Refuge tax.....	23,907 23		
Taxes on all accounts.....			

The total tax listed for this year was \$807,288 76, and the amount col-

lected was, as above, \$791,759 87, leaving in default \$75,528 89. The listed tax indicates a rate of about $14\frac{1}{2}$ mills for city, and 1 mill for water tax. The other principal sources of revenue (other than income from investments) are license fees and rents of wharves and market houses. These (which belong to the sinking fund) have produced yearly for the past six years the amounts stated below:

Fiscal year.	License fees.	Wharf rents.	Market rents.	Total income.
1861-2	\$60,013 65	\$7,680 43	\$11,348 16	\$79,042 24
1862-3	84,370 58	12,311 84	11,319 18	106,994 10
1863-4	108,748 00	11,616 80	11,541 64	130,906 52
1864-5	132,161 45	21,524 66	9,448 61	154,134 75
1865 (9% mos)	139,293 30	18,982 84	8,169 58	156,435 72
1866	163,941 23	26,688 65	12,663 56	203,293 43

The increase of revenue from these sources is very satisfactory. We have no means of ascertaining the amount of the general taxes for a series of years.

The aggregate receipts into the City Treasury from all sources in 1866 amounted to \$1,256,752 85, and the expenditures to \$1,175,014 61, leaving a balance to credit of \$81,737 74, or, after adjustment of warrants outstanding at the commencement (\$16,669 61) and close (\$6,976 66) of the year a clear balance of \$72,044 79, which, added to the cash in Treasury January 1, 1866 (\$255,366 82), leaves a cash balance of \$327,411 61 for future appropriation.

The chief objects of expenditure in 1866 were: almshouse, \$14,064 65; bounty fund, \$31,336 57; city court and city officers, \$31,026 76; city revenue proper, \$40,865 85; schools, \$105,680 28; engineer and fire department, \$92,830 67; gas, \$27,449 37; house of refuge, \$34,589 95; hospital, \$23,678 32; pumps, wells and cisterns, \$89,786 78; sinking fund, \$198,645 25; street improvements, \$186,025 78; water fund, \$57,303 02; wharves, \$11,147 85; workhouse, \$28,041 46.

The sinking fund account is supported chiefly from licenses, market and wharf rents, &c.; and including \$144,952 93 balance from previous year had in 1866 disposable funds to the amount of \$464,946 31, and paid away \$229,023 70, leaving a balance of \$235,922 60.

The value of investments (bonds, notes and stocks) held by the sinking fund at the close of 1866 was \$515,334 59.

The general financial condition of the city is shown in the following list of assets and liabilities, December 31, 1866.

ASSETS.		LIABILITIES.	
Cash	\$327,411 61	Bills payable	\$110,925 00
Fire department property	53,255 55	Bonds (actual issue)	2,381,747 94
City's Interest and Div.		City warrants out	6,976 66
Fund in Gas Company	173,215 29	Cash due to Trust Funds:	
Louisville Gas Company	17,565 79	Bounty Bond & Int'l F'd	47,781 10
Est. of Refuse Property	81,191 77	Gas Light Fund	41,674 37
Market House Property	48,344 96	H. of Refuge Fund	1,326 14
Sinking Fund Investment	515,334 59	Loan Fund	9,247 07
Sec. in Water Co.	776,016 30	Old Liability Fund	26,638 73
" in L. & N. RR.	500,000 00	Rowans Heirs	1,345 95
" in L. & O. Co.	200,000 00	School Bond Fund	18,073 52
" in L. & Fr. RR.	3,237 50	Water Fund	57,319 49
Bills receivable	10,350 67		
Personal debts	183,468 84		
	\$3,883,317 87		\$3,705,464 96
Endorsements, checks, &c.	2,126,580 67	Surplus assets	2,304,873 58
Total	\$5,013,898 54	Total	\$5,013,898 54
COLLATERALS.		ENDORSEMENTS	
Stock and Mortgages	\$1,975,000 00	Bonds	\$1,975,000 00

The population of Louisville, according to a local census taken in 1866, was 125,800, and the

Valuation for city 'ax.....	\$53,935,420, or per capita \$426.37
" for water tax.....	63,933,654, or " 508.31
Tax on city valuation.....	513,355, or " 4.09
" on water valuation.....	63,933, or " 0.51
City debt proper.....	2,381,748, or " 18.90
Total Liabilities.....	2,705,465, or " 21.50
Total Assets.....	5,013,838, or " 20.35
Bond Endorsements.....	1,875,000, or " 14.90

COMMERCIAL LAW.—N^o. 36.

OF LIFE INSURANCE.

(Continued from page 120, vol. 57.)

An answer, "not subject to fits," is not necessarily falsified by the fact that the life-insured has had one or more fits. But if the question had been, "Have you ever had fits?" then it is said that any fit of any kind, and however long before, must be stated. But if a man had a fit when a young child, and forgot to mention it, or considered it wholly unimportant, and it had nothing to do with his state of health, it would hardly be held a falsification which would avoid the policy.

As there is always a general question as to any facts affecting health not particularly inquired of, a concealment of such a fact goes to a jury, who are to judge whether the fact was material and whether the concealment were honest. As when a life insured was a prisoner for debt, and so without the benefit of air and recreation; and where a woman whose life was insured had become the mother of a child under disgraceful circumstances, and the insurers defended against the policy on this ground, the question was submitted to the jury, whether the concealment of these facts was a material concealment.

If the policy and the papers annexed or connected put no limits on the location of the life-insured, he may go where he will. But if, when applying for insurance, he intends going to a place of peculiar danger, and this intention is wholly withheld, it would be a fraudulent concealment.

If facts be erroneously but honestly misrepresented, and the insurers, when making the policy, knew the truth, the error does not affect the policy. Nor does the non-statement of a fact which diminishes the risk, or concerning which there is an express warranty.

If upon a proposal for a life insurance, and an agreement thereon, a policy be drawn up by the insurers and presented to the insured and accepted by them, which differs from the terms of the agreement, and varies the rights of the parties concerned, equity will interfere and deal with the case on the footing of this agreement and not of the policy. But it may be shown by evidence and circumstances that it was intended by the insurers to vary the agreement and propose a different policy to the insured, and this was understood by the insured, and the policy so accepted.

INSURANCE AGAINST DISEASE AND AGAINST DISHONESTY OF SERVANTS.

Of late years, both of these forms of insurance have come into practice, but not so long or so extensively as to require that we should speak of them at length. In general it must be true, that the principles already stated as those of insurance against marine peril, or fire, or death, must apply to these other—and indeed to all other—forms of insurance, excepting so far as they may be qualified by the nature of the contract.

From one interesting case which has occurred in England, it seems that when an application is made for insurance or guaranty against the fraud or misconduct of an agent, questions are proposed, as we should expect, which are calculated to call forth all the various facts illustrative of the character of the agent, and all which could assist in estimating the probability of his fidelity and discretion. But a declaration of the applicant as to the course or conduct he was to pursue was distinguished from a warranty. He may recover on the policy, although he changes his course, provided the declaration was honest when made and the change of conduct was also in good faith. In this case the application was for insurance of the fidelity of the secretary of an institution. There was a question as to when and how often the accounts of the secretary would be balanced and closed; and the applicant answered that these accounts would be examined by the financial committee once a fortnight. A loss ensued from the dishonesty of the secretary; and it appeared to have been made possible by the neglect of the committee or the directors to examine his accounts in the manner stated in the policy. But the insurers were held, on the ground that there was no warranty.

THE CHONTALES GOLD MINES.

It is seldom we get an account of the South American Gold Mines from any but interested or equivocal sources. We find, however, an interesting general account of the Chontales Gold Mines in the London *Athenaeum* of a late date, authenticated by the name of the writer, Dr Berthold Seeman, from which we have prepared the following:

The stillness of the virgin forests, which to this day cover a great part of Chontales, would probably not have been broken for generations if it had not been for the discovery of a very productive gold mine, which, until recently, was the property of a Spanish American, and has now passed into the hands of English capitalists. For many years the owner had drawn none but blanks in the great lottery of mining enterprise. He had been one of the first settlers at Libertad, a place which derived its name from a grogshop of that name, where everybody had liberty to do pretty much as he liked. One day, when hopelessly embarrassed, a man, with the image of St. Peter, passed the house asking whether anybody wished to offer up prayers to the saint. The poorer classes of Nicaragua do not always give money to these wandering image-bearers, but frequently whatever good things they may have in their possession, such as cocoa beans, chocolate, lumps of sugar, wax candles, &c.; and the wife of the impoverished miner could lay her hands on nothing better than a piece

scented soap. But she promised to present a chalice to the village church if St. Peter would let her husband, who had been so singularly unfortunate in gold mining, find a good silver mine. The husband having fully ratified the vow, both awaited with confidence the asked for intercession. They were not doomed to be disappointed. A short time afterwards an Indian called, and the miner's miserable plight became at once the topic of conversation. 'If it is rich stones you are harping after,' said the Indian, 'I can take you to a place where you shall find enough to last you a lifetime.' The offer was gladly accepted, on condition that if the place turned out as rich as represented, the Indian should receive three cows for showing it. Chopping-knife in hand, and a few provisions on their back, the two entered the thick virgin forest which stretches from Libertad to the shores of the Atlantic Ocean. After traveling several leagues, they arrived at a place where the Indians were in the habit of shooting Javalis, a kind of wild boar. "Will this satisfy you?" asked the guide triumphantly. The miner was dumbfounded. After years of fruitless toil and search, he saw at last before him a property combining all the features of a good mine. On the slopes of a hill rising 500 feet above a river-bed, he found a wide lode of quartz rock, rich in silver and gold, and traceable for several miles; magnificent waterfalls available for setting in motion the most powerful machinery, and in every direction timber of excellent quality for mining purposes. This was the now famous Javali mine, the ore of which up to that time was taken out in small quantities only and ground to powder in mortars cut out of the solid rock of the river bed whenever the Indians required gold for trading purposes. Hastening to register his claims officially, the enraptured miner tried to raise the funds necessary for turning this valuable discovery to account; but his credit was so low that not one of his countrymen would lend him a few dollars to buy picks and shovels. He would have been obliged to abandon all thought of working the mine, if a generous foreigner had not come forward with the necessary funds, and also stood between him and his relentless creditors, when the richness of the Javali came to be known. In a short time the miner was able to pay off all his and his father's debts and purchase houses and estates. The chalice promised to St. Peter's shrine was not forgotten. It was made of thirty-six ounces of gold, and by the hands of a German goldsmith, under whose hospitable roof the miner was living when his wife registered the vow.

The discovery of the Javali, or rather the betrayal of its existence by the Indian, led to the exploration of the surrounding district, and the finding of more than 300 mines of more or less importance. A proper geological survey of this undoubtedly rich district, rich in both silver and gold, has, however, as yet not been attempted, though it might be expected to lead to results which would more than a thousandfold repay the expenses of such an undertaking. But Nicaragua, like most parts of Spanish America where the foreign element has as yet not penetrated, is so poor that it has no funds for projects of this nature. Though all mines are national property, the discovery and tracing of them out is entirely left to the individual enterprise of people who have acquired a certain amount of empirical geological knowledge, and who, when they find rich spots, make them their own by registering them officially. As long as the mines are worked, and worked properly, the title thus acquired is un-

disputed; but if for two years no work is done in them, they revert once more to the nation, and may be registered anew. Some of the most important mines of Chontales are now owned by foreigners, who are gradually introducing a better system of working them. The natives still go on mining in the most expensive and primitive manner. Deep shafts they cannot sink, because they do not know how to timber the ground; and not having deep shafts, they cannot avail themselves of even such a simple contrivance as a tackle, and have to carry all the ore on the backs of men, in leather bags fastened by a strap round the forehead. A man carries about a hundredweight at a time, and has to climb up steep trunks of trees in which notches have been cut. I damp weather these primitive ladders are very slippery, and cause numerous accidents. The ore is ground by water power and in *rastros*, heavy rocks of quartz and basalt being used for crushing.

Many of the miners are natives of the neighboring republic of Honduras. They are better workmen than the Nicaraguans, but enjoy the reputation of being greater thieves. Amongst them are some who practice the revolting habit of earth eating. The earth eaters do not constitute a separate tribe, but are principally negroes and half castes, seldom Indians, never pure whites. They are easily recognized by their peculiarly livid and sickly color. Their nickname, "toros" (bulls), must have been given them not on account of their bodily strength, for they are poor, emaciated people, but more probably because they lick the ground, as bulls are sometimes wont to do. The earth, which is a kind of clay found in the mines. I shall have it properly analyzed when I get home, and it may then be compared with the edible earth of Syria, to which Ehbrenberg's researches apply, and with that mentioned some time back by the *Pharmaceutica Journal*. It is called "jabonada," because when moist it has a certain soapiness and causes some foam when brought into contact with the saliva. It is cream-colored, often tinged with pink, and has a slightly fatty taste. When well selected, there is no sand in the pieces, the whole substance dissolving on the tongue; but as tit-bits of this kind are not always attainable, a slight admixture of sand is not objected to. Earth eating is a vice which, like any other vice, grows upon people, and when carried to excess kills its victims without mercy. The same arguments which are applied to the suppression of drunkenness are applied generally with as little success to earth eating. One of the miners in the Javali gave me a full account of the way he used to go on. He was about twelve years old when he took to the habit, and carried it on till he was twenty-five. Commencing little by little, he ultimately ate several pounds a day, and he lived successive days upon nothing but earth, always drinking a good quantity of water, and feeling little or no appetite for any other kind of food. At most times he used to eat the earth as it came from the mine, but sometimes he would vary the flavor by an admixture of common brown sugar or by toasting the clay over the fire. At last he carried earth eating to such an excess that he became seriously ill, and had to give it up to save his life. More than two years had elapsed since that time, but he retained nevertheless the livid look peculiar to earth eaters, and thought that he should never regain his natural color. It is very difficult to say what proportion of the mining population of Chontales are addicted to earth eating. As the majority regard

it as a vice, many practice the habit on the sly; but from my own observation I should say they amount to about ten per cent.

In these mountains a species of caoutchouc (known here by its Aztec name of *ule*), vanilla, sarsaparilla, quassia, fustic and other valuable woods abound, and there are many vegetable productions perfectly new to science. Amongst the most noteworthy are a pitcher plant (every umbel of which terminates in five flower-bearing pitchers, filled with water), and *Achimenes* with beautiful velvety leaves, a large white *Sobralia*, and a tree with fingered leaves and small round seeds, which are occasionally offered for sale by the Indians, and from which chocolate of a flavor superior to that of the common cocoa is manufactured. Some day this chocolate tree will doubtless be extensively grown by Europeans; and as it occurs in these woods together with the common naturalized cocoa, it may have been cultivated when this district was more thickly inhabited by Indians than it is at present.

You still see pure Indians in the Chontales Mountains, but they are not numerous, and are retiring into the solitude of the forest as fast as the white men or the more numerous half castes approach. Twenty years ago there are said to have been many Indian families about Libertad, but there are now a few only. Earlier still, centuries, ages ago, there must have been a large Indian population in the grassy districts of Chontales. A great number of ancient tombs, met with in almost every direction, sufficiently attest this. These tombs are found in plains having a rocky soil and good drainage. The Indians never selected ill-drained sites for their villages, and many of the most healthy towns built by the Spaniards in America are in localities originally selected by Indians. From what I saw, it would seem that in these ancient Chontales villages the houses were in the centre, and the tombs, placed in circles around, formed the outskirts. The tombs are of different heights and sizes. One of the largest, which was about twenty feet long by twelve feet wide and eight feet above ground, I saw opened by people in search of golden ornaments. It took four men about a fortnight to remove the heap of stones placed on the top of the grave and to lay the grave itself completely open. No gold was found, but a round pillar, seven feet high and eighteen inches across, which was standing upright in the centre of the tomb, a corn mill, in shape like those still in use in the country, a knife ten inches long, an instrument like a reaping hook, and a tiger's head (natural size), all of stone, and besides, some broken crocks and a quantity of balls as large as peas and made of burnt clay. In some instances, gold ornaments have been met with, but not in sufficient numbers to offer much inducement for people to destroy these venerable relics. Men of science will therefore find about Juigalpa, San Diego, Libertad and other places a sufficiently large number to enable them to throw some light upon the stone age of these extinct tribes.

The Indians who before the Spanish conquest inhabited Nicaragua did not construct any large temples or other stone buildings, as some of the other natives of Central America have done. But in some parts they made stone idols of considerable dimensions, some of them representing the human figure, and reminding us of those of Easter Island, in the Pacific. A most finished piece of sculpture I found near the Limon mine in New Segovia. It was a large font broken in halves, having on the

outside a human face representing the sun, the hair doing duty for the rays. But what struck me as singular was the circumstance that there was a long pair of mustachios, such as no Indian ever had, and the question at once suggested itself—did fancy induce the Indian artist to add this long appendage, or did he copy it directly or indirectly from a bearded race with which his countrymen had come in contact?

Although the gold regions of Chontales are very close to the Atlantic Ocean, yet there is no direct road between them and the seaboard, and all communication is kept up by American steamers passing up the river San Juan and the lake of Nicaragua. Passengers are discharged at San Ubaldo, where, during the wet season, they have to traverse the most awful swampy plains imaginable. They have, whether they like it or not, to plunge into holes filled with mud and water that make the hair of any novice in Central American travelling stand on end. One of my companions, who had never seen any other roads than those of England, despondingly inquired whether we could not go round when we came to the first of these mudholes, from which a Californian, out "prospepecting," was struggling with all his might to extricate himself and his wretched mule. My old shipmate, the late Captain J. Hill, R. N., has fixed the geographical position of St. Domingo, one of the larger mines, making the latitude, by observation, $12^{\circ} 16' N.$, and the longitude, from chart, $84^{\circ} 59' W.$ This leaves but a short distance between the principal mines and the seaboard, and from Pena Blanca, which is the highest known peak of Chontales, and may be about 2,500 feet above the sea, you can make out the hills about Blewfields, though not the ocean itself. At my suggestion, a meeting was called of all those who had either been from Chontales to Blewfields or who were interested in opening a direct road between them. A good many responded to the call, and I elicited much useful information, tending to show that it was practicable to cut a road from Javali to Aguas Muertas, the navigable part of the Blewfields river. Pena Blanca commands a very fine view. You cannot see any rivers, though they discharge themselves into the Atlantic, the Javali entering the Mico and the Mico the Blewfields; but you can see the Javali lode of auriferous quartz rocks for several miles, and distinctly trace the various branches (which in many instances have proved extremely rich) running into it. Further on, the eye, passing over dense virgin forests, encounters green savannas. The view is bounded on the east by the Blewfield hills, on the west by the lake of Nicaragua and its characteristic islands. What a capital subject for a geographical paper an exploration of this district would afford! It is truly virgin ground, where here and there you meet a few families of Indians—"Caribs" the half-castes of Nicaragua call them, though they do not practice the flattening of the head and other customs deemed peculiar to that race. The vegetation of Pena Blanca is distinct from that of any other mountain top I have seen in Chontales. I found a purple *Lobelia*, a scarlet caulescent Orchid and a crimson *Macleania*. Much to my regret, many of the woody plants had been destroyed by fire. On my last ascent, the gentleman who had kindled the flame was with me, and was somewhat astonished when instead of receiving unqualified praise for having cleared the view, I told him it was fortunate, standing as we did on the brink of a yawning precipice, that the enraged

botanist within me was somewhat mollified by my appreciation of the fine landscape which he had as it were unrolled.

There are a good many monkeys, grey squirrels, green parrots, wild turkeys, macaws, and snakes, in the woodlands of Chontales; the largest and most common snake, known by the native name of taboba, attains 6 to 8 feet in length, but is not venomous. In the grassy parts you find a good number of armadillos, which the natives are very fond of eating. We caught one to take home; but having to leave it a few days at some house, we were told that it had disappeared during our absence, the temptation of eating it having probably proved too strong. Gossiping about animal life, I should not omit alluding to a gigantic saurian, said to have been last year in New Segovia, and of the vertebrae of which people have made footstools. An account of "the monster" fills several columns of the official gazette of Nicaragua, and is from the pen of one Paulino Montenegro, B.A. The author states that having heard of the existence of a gigantic reptile near LaCuchilla, he started, in company with several friends, to have a look at the animal, which was said to have made large burrows in the manner of moles, and been the cause of uprooting trees and making large stones roll down hill. He found everything as represented, and saw the course the animal, or rather animals, for there appeared to be two of different sizes, had taken. He did not obtain a sight of the animals themselves; but from the tunnels they had made, it was conjectured that they had the shape of the guapote fish of the country, were about twelve yards in length, and from impressions left on the wet ground, had "scales like those of the alligators." Ancient tradition, the reporter adds, knows of several monsters of similar size in the neighborhood. To a man of science the account given is altogether unsatisfactory; but before consigning it to the lumber-room of cock-and-bull stories, the affair ought to be looked into more closely. We must not forget that on the very highway of nations, the Isthmus of Panama, one of the largest, if not the largest terrestrial animal of tropical America (*Elasmotherium Bairdi*, Gill, or *Topirus Bairdi*, J. E. Gray) was allowed to roam about unknown to men of science, though well known to the natives, until quite recently Prof. Gill, of Washington drew attention to it. Since then the poor animal has had no peace. Both in the Zoological Gardens in Regent's Park and the British Museum have issued warrants against him. At the various Panama railway stations a reward is given by British agents to any one who may bring him the new tapir, either dead or alive.

EMIGRATION AT NEW YORK AND THE EMIGRATION BOARD.

This Summer ends the twentieth year since the establishment of the Commissioners of Emigration—and, during that period, four millions of immigrants have arrived at this port, seeking homes under our republican government. Four millions of names—enough to constitute a nation by themselves—are recorded upon the books of Mr. Bernard Casserly, General Superintendent of the Board of Emigration.

ORGANIZATION OF THE BOARD OF EMIGRATION.

The Board of Commissioners of Emigration, as at present constituted, was appointed by an act of the Legislature during the session of 1847. Its objects and duties were defined as being for the relief and protection of alien emigrants arriving at the port of New York, and provision was made that such emigrants should be entitled to aid for five years after their arrival; the expenses of the whole system to be defrayed by a small commutation fee, chargeable on every person landed here.

Previous to the passage of this act, the subject of the care and support of the alien emigrants was left either to the general quarantine and poor laws, or to local laws and ordinances, varying sometimes as to provisions, and very often as to their practical administration. A general tax, under State authority, levied on all passengers, was applied to the support of the Marine Hospital at Quarantine; and aliens as well as others suffering under contagious and infectious diseases, such as yellow fever, ship fever or small-pox, was there received; but no provision was made for applying any part of that fund to the relief of those requiring aid under other circumstances. Owners of vessels engaged in the emigration business were required by local ordinances to give bonds to indemnify the city and county in case of the emigrant becoming chargeable under the poor laws.

With the great and rapidly-increasing emigration from 1840 to 1847, these provisions were found very inconvenient to the shipowners, and wholly inadequate to the purpose of affording aid and relief to the emigrant suffering from sickness and destitution. The bonds remaining for a long time uncanceled were onerous to the better classes of shipowners, while in the case of others they were found of no value when attempts were made to enforce them. A more momentous objection to the system was, that from want of proper regulations and restrictions vessels were so overcrowded and the emigrants so poorly cared for as to cause a terrible average of sickness and mortality. This state of things was becoming more and more distressing as emigration grew larger, and the public health was seriously threatened.

Seeing the horrible oppressions, temptations and villanies to which the newly arrived emigrants were exposed, when they were the helpless prey of rapacious emigrant-shipper "runners," boarding-house keepers and canal-boat captains, a few public spirited citizens resolved at this juncture to take the matter in hand, and obtain by means of direct legislation such remedies as the local authorities were powerless to apply to reform these wrongs.

Among these persons were Archbishop Hughes, Andrew Carrigan, Thomas McElrath, John E. Develin and Addison Gardner. At Albany the attempted reformation encountered a tremendous opposition. The Almshouse Commissioners, the Common Council of this city, and other powerful organizations combined to prevent the passage of the measure; but it was finally carried, and the first effective step was thus taken to abate an evil which was rapidly assuming dangerous proportions.

THE EMIGRANT DEPOT.

Although the new Commissioners abolished many abuses; and contributed largely to the welfare of the emigrants, there were yet malignant

influences at work which were beyond their reach. The "boarding house" abuses and "ticket swindling" not only continued, but increased. To make an end of these, another appeal was made to the Legislature. A law was passed designating Castle Garden as an emigrant depot, requiring all emigrant passengers to be landed there, under the auspices of the Commissioners, one of whom—John A. Kennedy, the present Superintendent of Police—was designated as Superintendent. And here commenced a long and bitter warfare. All who lived by plundering the emigrants united to break down this barrier, affording, as it did, a safe and pleasant temporary retreat for the stranger. This combination of ruffianism and rascality, embracing boarding-house keepers, ticket agents, baggage smashers and runners was strong, politically and otherwise. Many of them had become wealthy upon their ill-gotten gains. But, after a long struggle they were beaten off, and the emigrants found protection within the walls of Castle Garden.

The warfare did not, however, end here; the ticket agents transferred themselves to Europe, commencing and successfully carrying on their depredations on the other side of the Atlantic. Thousands of emigrants arrived with railroad tickets purchased abroad, for which they had paid not only double and treble the regular fare, but on their arrival here they found themselves with spurious tickets and spurious drafts. Innocent and unprotected girls came consigned to houses of prostitution. To stay these latter practices the Commissioners resolved to send an agent to Europe.

The person selected was Mr. Robert Murray, who, receiving letters from Mr. Marcy, the Secretary of State, visited England, Ireland, France, Belgium, Switzerland, Prussia, Germany and Holland, and, by conferences with cabinet ministers and other authorities, was enabled to break up the foreign ticket agency thoroughly.

BENEFITS OF THE NEW SYSTEM.

The system thus established, though not absolutely perfect, has worked exceedingly well. It has at various times been modified or altered in matters of detail, as experiences suggested or legal or practical difficulties occurred; and the reports annually issued by the Board of Commissioners show that the amount of benefit derived from its operations is really incalculable. These reports exhibit, through elaborate statistical columns, how in twenty years from May, 1847, to May, 1867, three millions seven hundred and forty-five thousand six hundred and thirty-three emigrants landed at Castle Garden, in the port of New York. Relief was extended to one third of these, of whom a large proportion were hospital patients, requiring and receiving attention from the highest medical and surgical skill, and the best of hospital care. The expenditure of nearly six millions of dollars has been thereby involved.

This new system has secured results which heretofore were not thought of, among which is the confidence felt by the masses throughout the world: for as soon as the new system was in practical operation, and communication arranged between our Government and those of the old world, and advertising and security agencies established, then the tide of emigration multiplied, and continued its enormous increase until in 1854, in ten years from the institution of the Board of Emigration, it reached the

annual figure of three hundred and nineteen thousand two hundred and twenty-three. These were from all parts of the world, the majority from Great Britain and Germany. In twenty years the aggregate number is about four millions, and by the beginning of 1868 it will exceed that amount.

ARRIVALS.

The following table shows the number and nativities of alien emigrants who arrived at Castle Garden from May 5, 1847, to Jan. 1, 1867:

Ireland.....	1,486,100	Norway.....	14,978
Germany.....	1,317,069	Sweden.....	21,722
England.....	486,171	Italy.....	11,189
Scotland.....	86,890	Belgium.....	6,026
France.....	66,890	Spain.....	5,788
Switzerland.....	55,321	West Indies.....	5,744
Holland.....	23,679	Denmark.....	10,045
Wales.....	21,882	Poland.....	3,488
Sardinia.....	2,805	East Indies.....	162
South America.....	2,004	Greece.....	87
Portugal.....	1,378	Turkey.....	82
Nova Scotia.....	1,116	Arabia.....	8
Russia.....	924	Africa.....	53
Canada.....	613	Australia.....	30
Mexico.....	638	Japan.....	7
Sicily.....	294	Central America.....	12
China.....	383	Unknown.....	95

Sum total from May 5, 1847, to Jan. 1, 1867..... 3,582,574 ✓

Total from Jan. 1, 1867, to Aug. 31, 1867..... 168,059 ✓

Total emigration since the commencement of the present system was instituted..... 3,745,633

CASTLE GARDEN.

The buildings on the Battery called Castle Garden are the depot for the landing of emigrants, and for their transportation to different parts of the country. This depot is the principal one of the Board of Emigration, and whatever other buildings they have erected are but subordinate to this establishment. This department is divided into several subordinate bureaux. The rotunda in the centre of the building is the main department of the commission. In this is the general office of the Board of Emigration, including the office of Mr. Bernard Casserly, General Agent and Superintendent, and the offices and desks of his several clerks. Here are employed a large number of persons of different nationalities, for the offices of clerks and interpreters. These are well educated and intelligent men.

The first department is that of examination. Three men are employed to remain at Quarantine, whose duty it is to board every emigrant vessel that enters the port of New York, after having been duly examined and passed at Quarantine, to give advice to emigrants, obtain information as to their general condition, and to carry out the provisions of the several acts forbidding communication with the emigrants before landing. By this means the emigrant is forewarned of the many runnes for boarding houses, and "baggage smashers," who would fleece him of his money.

This method has been of incalculable service to hundreds of thousands of emigrants.

By the passage of a law of Congress, entitled, "A bill to amend an act entitled 'An act to encourage immigration,'" &c., this was inadvertently taken from the Commissioners and dispensed with, and for which a memorial was presented to the Senate of the United States by the Commissioners and *ex officio* Commissioners of Emigration apprising them of this negligence.

After landing, the emigrant passes through the examination and registering department of the rotunda. Here they are examined for the purpose of ascertaining if any are liable to be bonded, or in such condition of health as to require hospital care; and the name, occupation, age, birth-place and destination of each, with other necessary particulars, are recorded.

The Board has instituted railroad and express departments, with approved agents, whose business it is to provide tickets for their destination and to carry baggage to any part of the city.

There is also a board-and-lodging department, a wash-room, for temporary use; and arrangements are made with certain boarding house keepers of the city, who are present at every arrival, with their prices made public, in order that none of the emigrants may be swindled.

THE LABOR EXCHANGE.

A peculiar institution of the Commission is the labor exchange. Here are always a number awaiting situations, under the protection of the Board. The female department is closely inspected, and the detectives watch every effort made by the runners of brothels for the entrapping of the many girls seeking service as domestics. A large building is erecting to give greater facilities to this branch; and an officer has been appointed for its government.

DEPARTMENTS.

The next is the letter, telegram and information office, for the accommodation of the emigrants in ascertaining the whereabouts of friends. One of the departments most beneficial to the emigrant is the treasury.

Here all his foreign money is exchanged. If his friends have left money for him, on his arrival here he receives it. He may be without funds, through misfortune. He is then given sufficient to meet his present wants, leaving security for its return.

In fact, there are arrangements made to meet every conceivable want of the emigrant, and constant modifications of departments and government are made to adapt themselves to the requirements of the emigrant.

CHARACTER OF THE EMIGRATION.

By an inspection of the aggregate statement for the twenty years of operations, it is seen that the emigration from Ireland is somewhat in excess. While this has been the case in the history of the emigration of the country, yet, in looking at the reports of 1866 and of the year 1867 to the present week, it will be observed that Germany is at present sending to us a greater number of emigrants than any other nation of the world.

The destination of the majority of the Germans is for the great western prairies; so with the Danes, Swedes, Welsh, Norwegian and Polanders, and a portion of the Italian; but the English, Irish, French, Spanish and Chinese fill up our seaboard towns.

It is said by those engaged for many years in the emigrant business that of all pauper classes who arrive at our shores the English is the most abject and degraded, and the majority of the poorer classes seldom leave the seaboard states unless transported by private arrangement, or by agents of the Commission.

DESTINATIONS.

The following table will give an idea whither the tide of emigration flowing into the country tends. It is taken from the report of the Commissioners of last year, ending January, 1867:

Arkansas.....	32	New Hampshire.....	180
Alabama.....	96	Nova Scotia.....	50
Australia.....	3	New York.....	97,607
British Columbia.....	11	New Jersey.....	7,877
Canada.....	1,741	Nebraska.....	119
California.....	1,678	North Carolina.....	140
Connecticut.....	3,711	New Brunswick.....	60
Central America.....	7	Oregon.....	88
Cuba.....	11	Rhode Island.....	2,392
Delaware.....	288	Ohio.....	12,923
District of Columbia.....	890	Pennsylvania.....	24,874
Florida.....	10	South Carolina.....	171
Georgia.....	226	South America.....	27
Illinois.....	23,386	Texas.....	124
Iowa.....	4,493	Tennessee.....	566
Indiana.....	3,201	Vermont.....	238
Kentucky.....	1,436	Virginia.....	1,006
Kansas.....	468	West Indies.....	15
Louisiana.....	550	Wisconsin.....	9,160
Massachusetts.....	11,374	Utah.....	3,083
Maryland.....	1,318	Nevada.....	4
Maine.....	330	Colorado.....	30
Michigan.....	4,185	P. E. Island.....	7
Minnesota.....	2,459	Idaho.....	1
Missouri.....	4,918		
Mexico.....	19	Total.....	228,851
Mississippi.....	65		

The above number is one thousand less than the total report of 1866 gives credit for, but it will answer as a criterion by which to judge of the influx and dispersion of the westward bound thousands that yearly enter our country. The majority of those remaining in New York is from Ireland.

THE WARD'S ISLAND HOSPITAL.

One of the best hospitals in the world is that erected on Ward's Island, connected with the Castle Garden establishment. It was planned by John W. Ritch, and has been pronounced as among the most perfect models of hospital construction. The amount expended for the buildings of the hospital was \$187,373 19. The report says that the number of inmates, whether diseased in the hospital or infirm and helpless in the other depart-

ment during the year was 10,306, being 2,881 more than in 1865, and 5,395 more than in the year preceding. The average number at any one time was about 1,081. The net cost of support of the Emigrant Hospita was \$142,749 35, being \$13,543 98 more than in 1865, \$26,726 64 more than 1864, \$75,695 21 more than in 1863, \$96,604 95 more than in 1862, \$87,507 14 more than in 1861, \$83,835 94 more than in 1860, and \$87,858 95 more than in 1859. During the first month of the present year it averaged \$1,182, and is at the present about \$1,700.

The following summary gives the aggregate results of the practice, both medical and surgical, during 1866:

Cared for in hospital during 1866 (including 647 remaining on 1st January, 1866,) together with 438 births.....	6,829
Number discharged, cured or relieved.....	5,468
Number died	768
Number remaining at the end of the year.....	878

The whole of the institutions under the supervision of the Board of Emigration are yearly becoming more extensive; and this bureau, it will be observed, is to-day one of the largest in the country. Its efforts are in every way commendable for the good already accomplished.

IMMIGRATION THIS YEAR.

The emigration during the present year is somewhat in excess of last year. From January to August 21st, 1867, we have as follows:

Ireland	45,895	Nova Scotia	18
Germany	77,042	Sardinia.....	....
England	21,656	South America.....	45
Scotland.....	3,679	Canada.....	25
Wales	118	China	7
France	1,070	Sicily.....	....
Spain.....	121	Mexico	94
Switzerland	2,959	Russia	127
Holland	1,826	East Indies.....	8
Norway.....	270	Turkey.....	6
Sweden.....	3,759	Greece.....	2
Denmark	1,159	Poland	206
Italy	625	Africa	1
Portugal	19	Central America.....	7
Belgium	1,469	Australia.....	30
West Indies.....	174	Japan.....	57

The following is the total amount for each month up to August 21, 1867:

For the month of January, 1867	7,541
" February, "	5,777
" March, "	13,825
" April, "	25,307
" May, "	25,428
" June, "	40,794
" July, "	22,437
And to August 21, 1867.....	11,932
Total in 1867	163,069

RAILROAD EARNINGS FOR JULY.

The gross earnings for the under-mentioned railroads for the month of July, 1866 and 1867, comparatively, and the difference (increase or decrease) between the two periods, are exhibited in the following statement:

Railroads.	1866.	1867.	Increase.	Decrease.
Atlantic and Great Western.....	\$462,074	\$400,116	.....	\$62,556
Chicago and Alton.....	351,597	356,143	34,546	.....
Chicago and Great Eastern.....	86,087	81,500	.....	4,587
Chicago and Northwestern.....	903,586	880,334	71,501	.....
Chicago, Rock Island and Pacific.....	271,008	274,806	3,797	.....
Erie.....	1,203,841	1,071,812	.....	126,651
Illinois Central.....	480,586	497,531	16,895	.....
Marietta and Cincinnati.....	93,033	104,594	10,571	.....
Michigan Central.....	384,686	313,031	.....	11,965
Michigan Southern.....	386,499	313,079	.....	35,680
Milwaukee and Prairie du Chien.....	170,795	180,000	.....	40,785
Milwaukee and St. Paul.....	308,735	198,000	.....	10,785
Ohio and Mississippi.....	347,223	233,000	.....	12,223
Pittsburg, Fort Wayne and Chicago.....	552,373	534,733	.....	17,645
Toledo, Wabash and Western.....	314,917	309,561	4,574	.....
Western Union.....	35,506	36,363	.....	37,346
Total in July.....	\$5,367,356	\$5,754,795	\$.....	\$312,061
Total in June.....	6,706,446	5,515,741	.....	580,705
Total in May.....	6,402,397	5,907,630	.....	494,637
Total in April.....	5,473,137	5,513,735	399,611	.....
Total in March.....	5,593,523	5,639,601	46,078	.....
Total in February.....	4,664,626	4,796,978	134,453	.....
Total in January.....	5,373,441	5,413,437	34,996	.....
Jan.-July: 7 months.....	\$40,186,305	\$39,142,940	.....	1,043,365

The gross earnings per mile of road operated for the same month of the two years, are shown in the table which follows:

Railroads.	Miles of road.		Earnings.		Difference.	
	1866.	1867.	1866.	1867.	Incr.	Dec.
Atlantic & Great Western.....	507	507	\$913	\$739	...	\$174
Chicago and Alton.....	280	280	1,143	1,373	120	...
Chicago and Great Eastern.....	234	234	864	864	...	30
Chicago and Northwestern.....	1,093	1,145	733	769	...	14
Chicago, Rock Island & Pacific.....	410	410	661	670	9	...
Erie.....	798	775	1,514	1,333	...	181
Illinois Central.....	703	703	679	703	34	...
Marietta and Cincinnati.....	251	251	393	434	41	...
Michigan Central.....	265	265	1,140	1,098	...	42
Michigan Southern.....	534	534	646	597	...	49
Milwaukee & Prairie du Chien.....	384	384	730	556	...	174
Milwaukee and St. Paul.....	275	275	759	703	...	57
Ohio and Mississippi.....	340	340	737	691	...	86
Pittsburg, Ft. Wayne and Chicago.....	468	468	1,180	1,143	...	33
Toledo, Wabash and Western.....	531	531	565	594	9	...
Western Union.....	177	177	483	330	...	54
Total in July.....	7,034	7,134	\$348	\$308	\$..	\$40
Total in June.....			963	816	...	137
Total in May.....			912	839	...	53
Total in April.....			778	816	38	...
Total in March.....			795	791	...	4
Total in February.....			668	673	10	...
Total in January.....			764	760	...	4
January-July: 7 months.....			\$5,713	\$5,434	\$..	\$219

THE NATIONAL BANKS—THEIR CONDITION FIRST MONDAY OF JULY, 1887.

We have received from Mr. Hurlburt, the Comptroller of the Currency, the following statements of the National Banks of the several States for the quarter ending the first Monday of July, 1887. Our readers will find the returns for the previous quarter in the last volume of the MAGAZINE (Vol. lvi.) page 378.

QUARTERLY REPORTS OF THE NATIONAL BANKING ASSOCIATIONS OF THE DIFFERENT STATES.

RESOURCES.

	New York.	Massachusetts.	Pennsylvania.	Ohio.	Connecticut.	Illinois.	Rh. Island.	New Jersey.	Maryland.	Indiana.
Loans and discounts	209,174,794.59	97,970,834.07	75,847,492.48	28,408,404.57	20,451,757.11	17,700,811.13	20,865,684.34	17,605,130.87	17,024,880.96	12,772,972.23
Real Est., fur. int. and fixt.	7,465,070.53	2,320,814.94	2,701,109.65	783,006.85	657,459.84	416,778.68	569,459.87	540,150.54	682,779.40	473,693.98
Current exp. nec.	1,680,619.64	432,631.11	688,940.64	191,763.98	94,690.86	144,463.88	90,376.26	67,837.15	87,640.74	130,851.25
Prepaid taxes	1,460,478.64	117,830.15	688,940.64	95,763.98	90,111.86	46,461.80	49,432.87	67,837.15	119,771.76	170,283.95
Cash items	100,067,851.41	6,115,000.75	6,795,034.68	791,192.03	688,397.48	1,062,891.47	407,543.33	670,008.31	1,055,413.11	1,615,709.61
Due from National Banks	23,120,259.77	5,813,000.97	12,984,635.63	4,301,137.99	5,976,718.84	4,383,117.62	2,766,060.16	8,879,468.89	2,143,328.91	3,894,466.97
Due from other banks	8,182,155.00	811,854.47	1,281,650.61	1,048,323.45	948,606.54	896,627.16	67,081.00	383,523.55	658,750.97	1,034,466.97
U. S. bonds to secure depositions	78,892,150.00	64,585,000.00	44,087,300.00	30,618,000.00	19,440,000.00	10,846,360.00	14,185,000.00	10,433,400.00	10,950,000.00	12,473,800.00
U. S. bonds & secut. on hand	17,613,150.00	8,193,400.00	6,811,750.00	4,812,350.00	1,190,150.00	1,094,800.00	946,000.00	930,000.00	950,000.00	1,173,800.00
Other stocks, bonds & mort.	11,528,877.55	1,971,470.00	2,069,225.70	180,653.58	1,993,300.00	701,600.00	946,000.00	874,700.00	897,700.00	987,680.00
Bills of National Banks	3,989,884.00	8,100,408.00	1,887,921.00	812,373.00	832,831.00	1,151,913.00	414,068.00	603,353.00	801,911.00	253,749.00
Bills of State banks	3,197,448.00	9,128.00	72,651.00	41,889.00	2,643.00	8,253.00	1,198.82	18,358.00	9,654.00	9,376.00
Specie	6,353,905.61	865,640.85	872,419.45	68,736.85	95,769.90	64,317.37	8,198.82	138,159.63	374,745.45	46,884.80
Legal Tender Notes	47,680,706.86	9,894,009.85	14,008,725.40	4,716,511.53	1,453,763.14	4,381,745.15	1,047,870.68	1,771,910.00	3,272,614.97	2,083,773.19
Compound Interest Notes	31,385,900.00	12,578,350.00	13,606,305.00	3,191,840.00	1,895,726.00	1,584,160.00	1,017,670.00	1,883,460.00	1,984,910.00	1,248,385.00
Aggregate	559,337,300.18	257,252,848.78	187,886,357.65	73,955,663.17	61,366,350.46	45,247,267.71	42,867,436.87	38,016,619.25	40,314,236.84	24,093,143.45

LIABILITIES.

Capital stock paid in	115,610,441.00	72,682,000.00	49,377,000.00	21,804,780.00	94,324,820.00	11,630,000.00	30,864,876.00	11,828,260.00	12,380,302.50	12,687,000.00
Surplus fund	22,760,031.58	10,471,917.00	10,471,917.00	3,600,130.25	3,507,601.51	1,881,436.77	991,044.08	1,977,358.56	1,400,067.65	1,534,747.01
Nat. bank n'es outstanding	25,048,283.00	25,048,283.00	13,203,487.00	17,055,194.00	10,335,679.00	19,330,306.87	15,461,004.61	13,973,241.68	13,654,807.96	10,253,589.46
Individual deposits	966,703,455.68	55,618,119.19	72,898,749.51	20,490,438.75	11,813,312.88	18,330,306.87	7,851,049.47	9,060,089.95	8,600,943.45	7,119,857.40
United States deposits	5,938,070.14	4,976,581.25	6,885,966.25	3,410,110.88	1,009,956.76	1,749,530.00	734,949.47	960,089.95	860,943.45	719,857.40
Dep'ts of U. S. disb'g office's	64,810.00	63,409.00	90,069.00	31,130.86	47,776.14	941,267.69	11,337.89	1,337.89	146,083.99	121,686.00
Due to National Banks	85,540,699.61	11,514,000.00	8,252,764.17	2,159,409.91	3,247,650.08	2,335,047.95	633,099.81	1,304,405.08	1,768,600.17	583,519.15
Due to other banks & bank's	14,068,697.65	1,484,998.73	1,484,773.80	1,881,008.73	3,846,870.80	1,231,891.90	438,365.51	1,104,419.97	397,851.68	58,946.00
State bank circulat'n outst'g	1,146,163.00	1,623,073.00	684,661.00	48,131.00	43,553.00	3,721.00	523,940.00	380,940.00	378,145.00	10,000.00
Profits	10,641,268.97	5,187,000.00	3,009,859.00	976,341.86	1,383,818.88	1,004,939.08	944,000.00	944,000.00	944,000.00	930,863.99
Aggregate	859,337,300.18	257,252,848.78	187,886,357.65	73,955,663.17	61,366,350.46	45,247,267.71	42,867,436.87	38,016,619.25	40,314,236.84	24,093,143.45

NEW-YORK.

	Mass.	Maine.	Missouri.	Michigan.	Vermont.	Iowa.	N. Hampsh'.	Wisconsin.	Delaware.	Tennessee.	Kentucky.
Loans and Discounts	8,910,775 00	8,116,983 99	8,708,367 21	5,688,868 97	4,615,313 61	3,683,378 97	3,611,988 51	2,910,187 18	2,146,888 00	2,983,360 49	2,983,360 49
Real estate, furnit. & fix't's.	239,808 78	281,363 20	318,460 44	100,613 30	265,364 63	101,560 06	178,367 31	110,635 19	126,878 04	194,584 23	194,584 23
Current expenses	13,367 90	68,363 76	81,910 43	88,612 71	87,088 48	96,897 76	38,353 47	21,116 03	46,800 86	28,815 00	28,815 00
Premiums paid	13,719 80	104,604 39	14,147 40	31,194 46	17,379 36	151,073 19	82,743 61	57,768 30	46,704 29	10,063 37	10,063 37
Cash items	32,491 87	890,868 58	1,090,868 58	1,090,868 58	1,090,868 58	1,090,868 58	1,090,868 58	1,090,868 58	1,090,868 58	1,090,868 58	1,090,868 58
Due from National Banks	1,660,887 89	1,091,451 88	1,673,340 11	949,497 88	808,189 35	1,321,978 98	1,313,703 64	857,961 74	857,961 74	482,953 59	482,953 59
Due from other banks	13,644 71	206,130 97	104,288 19	14,498 46	154,888 35	18,004 06	63,630 88	42,602 85	147,373 68	133,064 16	133,064 16
U. S. Bonds to secure circ'n	8,267,960 00	8,267,960 00	4,357,700 00	6,444,000 00	3,712,160 00	4,778,000 00	3,843,350 00	1,848,800 00	1,416,500 00	2,660,000 00	2,660,000 00
U. S. Bonds to secure depo's	770,450 00	638,360 00	400,000 00	693,360 00	604,000 00	745,860 00	600,000 00	60,000 00	60,000 00	811,000 00	811,000 00
U. S. Eds. & secur. on hand	656,850 07	406,300 00	213,700 00	656,150 00	868,800 00	404,760 00	368,760 00	25,000 00	486,500 00	65,000 00	65,000 00
Other st'ks, bds. & mortg's.	371,833 83	916,244 48	210,399 00	40,859 07	146,028 00	81,400 00	31,385 00	81,358 78	816,088 00	80,968 00	80,968 00
Billie of National Banks	267,354 00	268,867 00	126,686 00	116,588 00	116,588 00	179,946 00	105,543 00	32,630 00	273,697 00	100,450 00	100,450 00
Bills of State Banks	6,874 00	12,860 00	4,353 00	6,059 00	6,059 00	366 00	576 00	6,161 00	45 00	31 00	31 00
Specie	19,174 54	101,353 63	11,870 23	27,393 36	48,364 03	6,945 89	17,393 31	9,698 57	87,269 18	4,364 16	4,364 16
Legal tender notes	685,365 54	-619,544 99	1,063,378 98	589,098 85	1,366,545 69	260,869 31	581,614 49	172,148 18	704,871 28	664,881 76	664,881 76
Compound interest notes	679,890 00	843,860 00	663,560 00	497,480 80	639,300 00	316,900 00	496,835 00	166,310 00	281,680 00	351,590 00	351,590 00
Aggregate	23,501,323 64	18,683,678 03	16,401,371 66	15,367,419 66	13,343,656 78	13,012,606 97	10,778,686 03	4,822,979 21	7,647,017 19	7,643,346 05	7,643,346 05

ILLINOIS.

	Capital stock paid in	Surplus fund	Profits
Capital stock paid in	8,905,000 00	7,028,300 00	18,683,678 03
Surplus fund	7,028,300 00	8,905,000 00	23,501,323 64
Profits	18,683,678 03	7,028,300 00	8,905,000 00
Individual deposits	4,848,969 68	5,265,591 61	10,114,561 29
United States deposits	497,886 34	505,939 95	1,003,826 29
Deposits of U. S. dish'g office	201,083 11	1,044 06	202,127 17
Due to National Banks	46,975 06	1,816,854 37	1,863,829 43
Due to other banks & bank's	80,588 00	694,753 01	775,341 01
State bank circular's outst'd	678,365 61	60,335 09	738,700 70
Aggregate	23,501,323 64	18,683,678 03	16,401,371 66

DEBT AND FINANCES OF BUFFALO.

The Comptroller of Buffalo, under date of July 1st, 1867, has issued his report on the financial affairs of that city for the year ending December 31, 1866, embracing the whole field of its valuation, taxation and indebtedness, and the receipts and disbursements on all accounts. The report also contains a comprehensive exhibit of the progress of the city, as relates to its finances, for the ten years ending as above. From this very valuable document we have compiled the following summary.

The debt liabilities of the city are ranged under the two heads of funded debt and temporary loans, which together amount to \$905,334.

The following are the details of the *Funded Debt* as it existed at the close of the year 1866:

Date of issue.	For what purpose bonds were issued.	Amount — Interest — Pmt.		
		Dec. 31, '66.	Rate.	Payable.
July 1, 1863.	Buff. & Brantford R.R. stock.	\$150,000.	7	Jan. & July..1873
May 1, 1863.	Franklin st. property.	85,000	6	May & Nov..1867
Aug. 1, "	..Elk St. market.	33,000.	6	Feb. & Aug..1871
Dec. 1, "	..Franklin St. property.	10,000.	6	June & Dec..1873
" 27, "	..Market grounds (Court St).	25,000.	7	" ..1878
" 31, "	..Central school property.	31,000.	6	" ..1879
" 31, "	..Market grounds (Batavia St).	25,000.	6	" ..1878
Feb. 2, 1867.	..Building markets.	63,000.	7	Feb. & Aug..1877
June 1, 1850.	..Judgments	12,000.	6	June & Dec..1867
" 2, 1863.	..Funding floating debt.	15,000.	7	" ..1863
Nov. 15, "	..Ship canal (construction)	11,000.	7	May & Nov..1868
" 15, "	..Funding floating debt.	17,000.	7	" ..1868
Dec. 15, "	..Defense of the Union	6,000.	7	June & Dec..1863
Jan. 1, 1863.	.."	23,000.	7	Jan. & July..1868
May 1, "	.."	13,000.	7	May & Nov..1863
Aug. 30, "	..Relief of conscripts.	6,000.	7	Feb. & Aug..1865
" 30, "	.."	10,000.	7	" ..1861
" 30, "	.."	10,000.	7	" ..1863
May 2, 1864.	..Relief of volunteers' families.	25,000.	7	May & Nov..1874
" 2, "	.."	25,000.	7	" ..1868

—total December 31, 1866, \$612,000.

The *temporary loan* liabilities have been contracted for purchases at the annual tax sales and for payments for school lots. The details are as follows:

Date of issue.	For what purpose bonds were issued.	Amount — Interest — Pmt.		
		Dec. 31, '66.	Rate.	Payable.
July 1, 1863.	Purchases at tax sales, 1860.	\$40,000.	7	Jan. & July..1867
" 1, 1863.	" " 1860.	25,000.	6	" ..1868
" 1, 1864.	" " 1861.	27,541.	7	" ..1869
" 1, 1864.	" " 1864.	24,538.	7	" ..1869
" 1, 1865.	" " 1865.	82,454.	7	" ..1870
" 1, 1866.	" " 1866.	79,491.	7	" ..1871
Sep. 18, 1-63.	School lot in Dist. 34	4,567.	7	Mar. & Sep..1873
July 1, 1865.	" " 14.	4,904.	7	Jan. & July..1867
Apr. 15, 1866.	" " 33.	3,840.	7	Apr. & Oct..1871

—total December 31, 1866, \$293,334.

Buffalo, including Squaw and Cranberry islands, covers an area of 23,874.64 acres.

The distribution of the area is thus—taxable lots, 20,856.74 acres; streets, 2,043.64; creeks, canals, slips and basins, 483.73; school lots, 28.54; engine-houses and police-stations, 1.27; market grounds, 10.90; church lots, 18.09; cemeteries, 257.32; public grounds, 31.29; hospital and asylum lots, 43.80; pest-house lots (on Squaw and Cranberry Islands), 8.75; Erie County property, 60.31; New York State property, 2.77; United States property, 38.89 acres.

The *public improvements* of the city consist of—paved streets, 54.17 miles; plank side-walks, 217.24; stone sidewalks, 63.11, and sewers, 57.76 miles. Total length of streets, 297.57 miles. The Assessors' valuation of property belonging to the city in 1866 was \$697,060, viz., engine lots and houses, \$63,360; central school property, \$39,400; squares and parks, \$329,250; markets and market grounds, \$177,000; public burying grounds, \$16,000; police-stations, \$13,000; courthouse and jail, (5-8ths of 90,000) \$56,250; pest-house and grounds \$2,800. These values are not assessable for taxation. The total valuation of school property (general and local) is \$321,970.

The population of the city by the United States census was, in 1810, 1,508; in 1820, 2,095; in 1830, 8,668, in 1840, 18,213; in 1850, 42,261; in 1860, 81,129. The Erie Canal was opened in 1825, and the Albany and Buffalo line of railroads in 1842. The population by the State census of 1855 was 74,214; of 1860, 81,129, and of 1865, 94,502. The increase from 1860 to 1865 was 16.49 per cent., or a fraction more than 3 per cent. per annum compounded. At the same rate the population in 1866 would be 96,872.

The *valuation of real and personal property for taxation* in each of the past ten years has been as follows:

Year.....	Real.	Personal.	Total.	Year.....	Real.	Personal.	Total.
1857.....	\$39,446,390	\$6,065,670	\$35,511,950	1863.....	\$34,677,175	\$6,944,180	\$31,621,350
1858.....	37,748,945	6,485,060	34,229,025	1864.....	35,210,815	6,828,045	31,788,990
1859.....	34,997,300	4,748,080	29,740,380	1865.....	36,491,960	6,517,510	33,009,415
1860.....	34,368,905	5,598,470	30,269,773	1866.....	36,868,210	7,780,080	33,568,240
1861.....	34,238,955	6,478,175	30,708,180	1866.....	36,423,335	8,519,875	34,967,700

It will be seen that the total valuation in 1857 was larger than in the year 1866. This may be attributed to the fact that the general revulsion of business during the former year occasioned severe losses to the business community, and the valuation of property gradually fell for several succeeding years, until it had reached its minimum in 1860 and 1861. After that time it has as gradually increased to its present valuation. It may be remarked, also, that the valuation placed on personal property is not commensurate with that of real estate, which may be accounted for by the general investment of surplus capital in national securities, which are not liable to taxation.

The accounts of the city are kept so as to show the receipts and expenditures based on general tax and other city income separately from the receipts and expenditures dependent on local assessments. The latter are chiefly for street, district school and other improvements. The receipts and expenditures of the general fund, according to the comptroller's statement, for each of the last ten fiscal years:

Year.	Receipts.	Expenditures.	Year.	Receipts.	Expenditures.
1857.....	\$460,450 64	\$345,384 47	1863.....	\$327,181 88	\$334,196 19
1858.....	438,840 43	364,904 18	1864.....	363,694 20	334,504 83
1859.....	399,437 48	304,783 88	1865.....	440,537 47	408,857 33
1860.....	309,783 40	303,443 18	1866.....	647,451 88	60,318 66
1861.....	378,848 14	268,644 49	1866.....	581,008 97	455,444 16

The general fund is raised by a tax levied annually upon the whole valuation; the income from markets, fees, and interest upon taxes, licenses, fines and penalties are also credited to this fund, which furnishes the means to defray the ordinary expenses of the city government. Of the receipts

in 1866, \$460,262 03 was from taxes, \$32,219 75 from school fund, and the remainder (\$38,526 89) from miscellaneous sources. The tax receipts would indicate a rate of \$1½ on the \$100 valuation. The principal objects of expenditures in the same years were: schools, \$161,909 66; police, \$56,772 77; fire department, \$45,841 03; public debt interest, \$36,542 18, and principal, \$8,000; lamps, \$32,405 96; water, \$20,004 25; streets, \$13,856 22; public health, \$11,980 11; harbor, \$13,802 10; &c., &c. A table in the report specifies the expenditures of each department for ten years.

The financial condition of the city, as shown on the general balance sheet of December, 1866, was as follows:

LIABILITIES.		RESOURCES.	
Bonded or funded debt	\$612,000 00	Taxes not collectable 18,446 47—	112,965 38
General treasury warrants.....	245,000 00	Res'ces Local fund) ..	30,211 28
		Worthless	4,804 08—
Gen'l fund liabilities.....	\$857,000 00	Tax certifica's unre-	
School prop'ty bonds..\$13,811 60		deemed	236,418 08
Local treasury war-		Interest.....	84,537 27—
rants.....	171,906 98—	Property owned by city.....	567,080 00
Tax loan bonds.....	280,023 73	School houses, lots, &c.....	221,970 00
Total liabilities.....	\$1,822,941 20	Total resources.....	\$1,468,667 86
Surplus resources.....	245,946 68		
Res'ces (Gen'l fund).....	\$181,481 75		

The following compares the population, valuation, income and expenditures, debt, and the total liabilities and resources of the city in 1860 and 1866:

	Absolute		Per capita—	
	1860.	1866.	1860.	1866.
Population.....	81,189	96,473		
Valuation.....	\$30,362,373	\$34,957,700	\$373 01	\$360 00
Income.....	909,788	581,008	2 88	5 45
Expenditures.....	807,446	485,444	3 78	5 01
General debt.....	537,000	613,000	6 60	6 30
School and tax bonds.....	197,605	293,334	2 43	3 00
Total bonded debt.....	734,605	906,334	9 05	9 30
Total liabilities.....	1,011,079	1,223,628	12 45	12 66
Total resources.....	1,250,886	1,468,487	15 41	15 14

From this it appears that the valuation is lower in 1866 than in 1860 by \$12.12 per capita. In the meanwhile the expenditures have increased from \$3 23 to \$5 01, or 34.32 per cent. The funded debt is but a fraction higher. Considering the increased cost of labor and commodities, this result exhibits a rare instances of municipal economy.

LIFE INSURANCE IN THE UNITED STATES.

The following table, compiled for the MERCHANTS' MAGAZINE by Mr. John Eadie, Secretary of the United States Life Insurance Company, of New York, exhibits, at a glance, the condition, number, date of organization, &c., of the Life Insurance Companies of the United States:

LIFE INSURANCE COMPANIES.						
Date of organization	Name of Company.	No. Policies in force.	Amount insured.	Assets.	Place of business.	State in which the company is incorporated.
1866	Atlantic Mutual...	723	\$1,815,750	\$175,533	Albany.	New York.
1866	American Popular.	425	1,040,360	149,674	New York.	"
1860	Etna	26,019	61,363,179	4,844,334	Hartford.	Connecticut.
1860	Am. Life & Trust.	7,970	18,638,000	1,516,461	Philadelphia.	Pennsylvania.
1848	American Mutual.	1,063	2,740,250	674,423	New Haven.	Connecticut.
1864	Brooklyn.....	1,701	5,314,000	604,413	Brooklyn.	New York.
1861	Berkshire.....	2,996	5,435,075	671,300	Pittsfield.	Massachusetts.
1866	Continental.....	1,531	3,700,100	295,848	New York.	New York.

1847..Connecticut Mut'l	40,842	121,082,652	18,316,475	Hartford,	Connecticut.
1850..Charter Oak	11,550	29,04,548	2,580,040	"	"
1855..Continental	1,841	3,765,200	463,002	"	"
1855..Connecticut Gen'l	573	1,229,500	294,424	"	"
1855..Equitable	12,226	58,784,840	2,077,789	New York,	New York.
1856..Economical Mut'l.	203	757,000	141,443	Providence,	Rhode Island.
1856..Franklin	89	885,700		Indianapolis,	Indiana.
1856..Germania	12,176	50,784,787		New York,	New York.
1854..Globe Mutual	4,410	11,486,218		"	"
1856..Guardian	5,201	11,660,860	22,973	"	"
1854..Great Western	410	1,191,500	1,389,550	"	"
1856..Girard Life & Tr. Es.	2,000	Est. 8,000,000	Est. 800,000	Philadelphia,	Pennsylvania.
1860..Home	8,976	17,682,726	1,231,678	Brooklyn,	New York.
1855..Hahneman	573	1,290,000		Cleveland,	Ohio.
1859..John Hancock Mut	2,662	6,401,922	544	Boston,	Massachusetts.
1853..Knickerbocker	8,171	24,330,585	1,357,945	New York,	New York.
1848..Mutual	36,490	120,321,081	18,435,507	"	"
1850..Manhattan	10,642	36,452,265	2,525,827	"	"
1851..Mass. Mutual	8,235	20,146,119	1,549,535	Boston,	Massachusetts.
1818..Mass. Hospital	15	87,000	561,169	"	"
1845..Mutual Benefit	20,769	92,843,251	11,729	Newark,	New Jersey.
1846..Maryland	Est. 1,000	Est. 3,500,000	Est. 000	Baltimore,	Maryland.
1855..Mutual, May 27, '57	1,221	2,900,135	044	Chicago,	Illinois.
1852..North America	7,460	18,459,992	405	New York,	New York.
1845..New York	20,847	60,420,275	092	"	"
1854..National	763	2,326,528	707	"	"
1844..New England Mut.	12,009	40,562,724	323	Boston,	Massachusetts.
1855..New Jersey Mut.	837	1,042,180	656,143	Newark,	New Jersey.
1859..North West Mut.	14,709	22,517,043	1,222,750	Milwaukee,	Wisconsin.
1850..N. Y. Life & Trust	181	665,650	1,921,372	New York,	New York.
1855..New York State	551	1,949,500	153,707	Syracuse,	"
1850..National	2,249	3,264,525	573,707	Montpellier,	Vermont.
1851..Phoenix Mutual	9,675	12,990,784	1,475,814	Hartford,	Connecticut.
1847..Penn. Mutual	2,458	10,654,240	1,697,730	Philadelphia,	Pennsylvania.
1855..Provid't Life & T.	543	1,389,400	205,526	"	"
1812..Penn Company & Ins. Ac.	Est. 200	Est. 1,000,000	4,762,449	"	"
1855..Security Life and Annuity	5,728	12,126,550	757,206	New York,	New York.
1846..State Mutual	2,223	3,929,523	714,954	Worcester,	Massachusetts.
1855..Southern	599	1,662,500	229,599	Memphis,	Tennessee.
1855..St. Louis Mutual	4,044	17,050,050	1,826,163	St. Louis,	Missouri.
1855..Travelers	824	2,080,450	30,872	Hartford,	Connecticut.
1850..United States	6,477	15,071,472	2,005,708	New York,	New York.
1855..Universal	1,716	4,674,220	514,026	"	"
1859..Union Mutual	9,072	20,357,025	2,121,429	Augusta,	Maine.
1854..Washington	2,787	12,017,962	737,129	New York,	New York.
1854..Widows' & Orphans' Benefit	2,120	6,530,064	530,239	"	"
1859..World Mutual	111	425,000	212,668	"	"
	349,322	\$368,864,895	\$108,997,543		

ACCIDENT AND CASUALTY INSURANCE COMPANIES.

1855..Accident Ins.	Es. 1,000	Est. \$4,000,000	\$193,750	Columbus,	Ohio.
1855..Fidelity (closing) ..	53	153,100	107,571	New York,	New York.
1856..Hartford	86	223,125	119,510	Hartford,	Connecticut.
1856..National Travel's ..	8,037	21,945,000	247,300	New York,	New York.
1855..N. Y. Acc'd't (clo.) ..	8,671	24,000,800	256,972	"	"
1855..Provident Life & Investment	Es. 2,000	Est. 7,000,000	212,223	Chicago,	Illinois.
1855..Railway Passengers' Assurance	2,300	8,094,000	294,101	Hartford,	Connecticut.
1855..Travelers'	43,618	122,919,000	741,527	"	"
1855..U. S. Casualty	2,612	10,787,550	152,784	Trenton,	New Jersey.
1855..U. S. Ac'd't (clo.) ..	5,887	19,210,000	195,994	Syracuse,	New York.
	31,844	\$319,151,645	\$2,551,453		

FOREIGN LIFE INSURANCE COMPANIES, AMERICAN BRANCHES.

1850..Brit. Commercial ..	255	\$2,429,571	\$227,725	New York,	England.
1857..Eagle and Albion ..	450	2,110,075	293,557	"	"
1858..International	570	1,432,145	Est. 242,000	"	"
1856..Liverpool & London & Globe	222	1,172,147	1,321,811	"	"
1845..Royal Insurance	642	1,364,425	524,193	"	"
	2,809	\$9,566,064	\$2,214,297		

AGGREGATE OF LIFE, ACCIDENT AND CASUALTY INSURANCE IN UNITED STATES BY HOME
AND FOREIGN COMPANIES.

Life Insurance by Home Companies.....	\$10,323	\$266,664,695	\$108,997,773
" " Foreign ".....	2,509	9,664,664	3,214,397
Accident and Casualty by Home Companies.....	253,181	976,431,500	112,211,771
Total Life, Accident and Casualty Insurance in U. S.	81,644	219,151,645	2,551,468
	483,775	1,195,583,305	114,765,383

NEW COMPANIES.

			Capital.
1867..Arlington Mutual.....	Richmond.....	Virginia.....	
1867..Atlas.....	St. Louis.....	Missouri.....	
.....British General (Agency).....	New York.....	New York.....	
.....Baltimore.....	Baltimore.....	Maryland.....	
1867..Covenant Mutual.....	St. Louis.....	Missouri.....	
1867..Cincinnati Mutual.....	Cincinnati.....	Ohio.....	\$100,000
1867..Excelsior.....	New York.....	New York.....	125,000
1867..Empire Mutual.....	Chicago.....	Illinois.....	120,000
1867..Equitable.....	Des Moines.....	Iowa.....	100,000
1867..German Mutual.....	St. Louis.....	Missouri.....	
1867..Great Southern and Western.....	New Orleans.....	Louisiana.....	
1867..Home Mutual.....	Cincinnati.....	Ohio.....	100,000
1867..Hartford Mutual.....	Hartford.....	Connecticut.....	
1867..Kentucky Mutual.....	Newport.....	Kentucky.....	
1867..Morris Life and Trust.....	Pottsville.....	Pennsylvania.....	
1867..Ohio.....	Cincinnati.....	Ohio.....	
1867..Nashville.....	Nashville.....	Tennessee.....	
1867..North American Life & Accident.....	Philadelphia.....	Pennsylvania.....	500,000
1867..National Life and Health.....	Kalamazoo.....	Michigan.....	500,000
1867..Southern Life Assurance & Trust.....	Mobile.....	Alabama.....	1,000,000
1867..Southern Mutual.....	Columbia.....	South Carolina.....	
1867..Union Central.....	Cincinnati.....	Ohio.....	100,000
1867..Western.....	Cincinnati.....	Ohio.....	

CHESAPEAKE AND DELAWARE CANAL.

This work is cut through the neck of the Chesapeake—Delaware peninsula and has a length of 12.63 miles (66 feet wide and 10 feet deep), with three locks (220 by 24 feet) overcoming a total rise and fall of 32 feet.

The principal features of the business of the Company for the five years ending May 31, 1867, are shown in the following statement:

	1863-62	1864-63	1865-64	1866-65	1867-66
Passages.....	14,393	15,417	12,811	11,496	12,137
Tonnage.....	674,805	728,670	916,973	732,918	734,664

Freights:

Coal.....	tons.....	176,772	217,943	280,761	266,267	261,873
Lumber.....	1,000 sq. feet.....	59,600	57,741	33,567	26,066	41,835
Timber.....	1,000 cubic ft. et.....	4,034	9,309	7,037	4,722	4,779
Grain.....	1,000 bush.....	3,883	1,241	696	708	1,531
Flour.....	barrels.....	190,104	207,005	167,860	121,523	115,521
Groceries.....	tons 2,000 lbs.....	19,943	33,335	33,710	30,622	26,823
Dry goods.....	tons 2,000 lbs.....	10,078	9,999	7,326	8,797	9,673
Iron.....	tons.....	43,080	37,760	26,000	34,630	41,225
Oysters.....	tons.....	17,909	23,006	21,320	12,787	11,843
Tolls.....	\$.....	263,134	269,113	424,313	350,940	344,197

The passages in 1866-67 were as follows:

	Steamers.	Barges.	Sail vessels.	Rafts.	Total
Going West.....	936	2,430	1,914	.....	5,280
" East.....	969	2,505	2,240	1,007	6,661

Of the coal forwarded in 1866-67, there was forwarded Eastward from the Pennsylvania canals 63,798 tons of semi-anthracite, shipped South from Philadelphia (Schuylkill region) 92,823 tons anthracite, and East from Cumberland re

gions, *via* canal to Washington, and *via* railroad to Baltimore, 224,951 tons bituminous.

The financial condition of the company on the 1st June, 1867, is shown in the following table :

Capital stock (including issues from cancelled loan).....	\$1,518,963 50
Mileage loan, due in 1886	2,284,000 00
Total	\$4,072,963 50
Cost (including old feeder, (110,925)	\$3,364,975 91
Held by Trustees—stocks and bonds	240,511 03
Contingent fund—stocks and bonds	51,800 00
Dividend fund—cancelled loan, real estate and cash	406,076 56
Total	\$4,072,963 50

The company last year paid a dividend of 3 per cent., and had an available remainder of \$83,624 35. It is proposed now to pay regularly semiannual dividends.

PROPOSED PROHIBITION OF RAILROAD EXPANSION.

The action of the Constitutional Convention at Albany in prohibiting the consolidation of railroad companies with a combined capital of \$20,000,000, is a matter deserving the earnest consideration, not only of the business community, but of the public at large. The alleged object of those who supported this important change in the organic law of the State, was to check the accumulation of capital in the hands of corporations, which might abuse their privileges and increased power to the detriment of legislative independence, and to the prejudice of the interests of the people of the whole State. It was urged in support of the proposition, that the great railroad combinations in New Jersey and Pennsylvania have proved injurious to industrial progress, and that they exercise a controlling influence upon the action of the respective legislatures. On argument it was stated that the sale of the Pennsylvania canals to the railroad companies actually resulted in an increase in the cost of passenger and merchandise transportation contrary to the conditions of sale, the companies being able to purchase the legislature, and thus prevent any action against them for breach of contract. Hence it was argued that the delegates should by their action prevent the organization or consolidation of great corporations, whose influence might endanger the purity and independence of the Legislature of this State.

It is almost inconceivable that so intelligent a body as the Constitutional Convention, should have been led by such reasoning to resort to the unusual expedient of special legislation to check the expansion of a particular branch of industry. If industrial undertakings are to be narrowed down to a point below legislative corruptibility, then there will be an end to progress. It is obvious that the adoption of this principle would lead to the most serious embarrassments in every department. For the charges of corruption to which certain legislatures of this and other States have rendered themselves liable are by no means limited to railroad transactions. Besides, the argument is too sweeping; the fears of the Convention are groundless. There is a point beyond which even a corrupt legislature will not dare to go; as they have to look to

the people for their election, on great questions of public interest they are not generally for sale. It is hardly necessary to point to any other circumstance in illustration, than the continuing of the fare on the Central Railroad at two cents per mile during the whole of the war period. A large majority of the people desired to ride at a cheap rate, and, therefore, the legislature refused to raise the fare, although wages and railroad material were doubled in price, and every consideration of justice and good sense demanded that the railroad should be permitted to charge a higher rate. But, in addition to all this, it should be remembered that the power really always remains with the people of the State. They reserve the right to amend all charters—to cut down prices, to limit profits, in a word, to cure all abuses. Under such circumstances what have we to fear? A corporation might have great influence for a time; but were it to abuse it, it would very soon be crippled by the people. We have great faith in the American public; diseases may develop themselves, but the curative power is always inherent in an elective government.

The grand question, however, not only for the people of this city and State, but for the whole Northwestern and Atlantic States, is the means of transportation of the surplus produce of the West to the seaboard. The Empire State lies directly in the track of this vast commerce, and all existing modes of transportation are utterly inadequate for the purpose. Even now we need not only two or three, but may soon require a dozen lines of direct railroad communication between this city and the heart of the great grain region. The principal objection then to the action of the Convention is that it ties us up, and prevents us from competing with other States for this rich commerce. Baltimore, Philadelphia and Norfolk are placed at an advantage. A cheap twenty million dollar railroad will not reach from the prairies to New York; and if the proposed constitutional prohibition should become a law, we must relinquish the contest for commercial supremacy. And yet beyond this special injury to the State, it will be of still greater detriment to the whole northwest, whose interests require all the avenues to the seaboard capital can give them.

Our railroad system has outgrown the local wants for which it was devised. Nearly all the great lines to the West are formed by the consolidation of old railroad companies and the construction of a few missing links. The New York Central, for example, which has proved so advantageous as an outlet for the West, is, as all know, a consolidation of old lines which formerly worked with little concert of action or harmony. It is obvious that if this great highway were broken up and divided into sections, each under different management, that it would operate most injuriously to the interests it now serves. The capital stock of the New York and Erie Railroad is \$25,000,000. Yet this and other railroad companies are to be precluded from increasing their accommodations and extending their facilities!

There is less reason for this limitation, or, we should rather say, there are more objections to it at the present time than there were a few years since. And there will be still more cogent reasons against it in the future. The time was when direct railroad travel from New York to Albany and Buffalo was regarded as grand achievements. We have got beyond all that now. We require direct railroad transportation, without break of

bulk, not only from this city to Chicago and the Mississippi, but also to the Pacific Ocean. The tendencies of the times are all in favor of the consolidation and centralization of capital for industrial enterprises, and it is difficult to see how or why these tendencies, when manifested in the direction of railroad enterprises—upon which all modern commerce depends—should be checked by legislative enactments. Our industrial undertakings must be on a larger, on a continually increasing scale, as the industries of the country continue to develop.

But we are told that there can be unity of action without consolidation. Most certainly, a person may travel from New York to Omaha and have his baggage checked even if he passes over twenty roads. But is it not self evident that there will be more to overcome to bring about this unity than if one board of directors controlled the entire route? In freight matters union is particularly difficult. The question of charges, of liability for losses, in fact a division of interests in almost every particular arises. The one subject of separate liability would always control with forwarders, (other things being equal) leading them to give preference to the route where there was no division. Then, too, the freight must be carried through without change of cars. But above all we should remember that one management can be more economical than twenty. This is an extremely important element, as it permits lower freights to be charged, and a saving secured in bringing the produce of the west to the seaboard. In a word there seems to us to be no room for argument on this point. The advantages of consolidation are very great—in fact, every day in the development of the country will the importance of through routes under the control of one direction increase.

PUBLIC LANDS OF THE UNITED STATES.

The Hon. Joseph S. Wilson, Commissioner of U. S. Land Office for 1866, has made a report from which we have prepared the following.—He claims that prominent among the indications of the growth and prosperity of the republic is the gradual expansion of actual settlements over the immense fields of the public domain. Our liberal system of land legislation has extended, and still continues to afford facilities for opening new farms, founding new cities, holding out incentives for immigration from the crowded capitals of the elder States and from abroad by stipulations for the acquisition of real estate, either agricultural or city property, on terms so easy as to enable the industrious to secure homesteads almost at nominal rates. That system founded by the illustrious statesmen of the Revolution has been enlarged under the lights of experience to meet the wants of increasing millions of settlers by successive legislative acts, from the ordinance of 1785 for the disposal of the public lands to the legislative enactments of the year 1866. It has not restricted its benefits to merely opening rich and boundless fields to individual settlement; investing title in local communities for school purposes in every township of six miles square; in giving means for the endowment of seminaries of learning and universities; but it has made concessions, on a stupendous scale, for

internal improvements, for opening ordinary roads, for spanning the North American continent with railways, and still further, in meeting the wants of diversified localities by liberal provisions for works of this class to connect centres of trade, and afford rapid means of intercommunication.

The landed estate of the Union is the great inheritance of the American people. How was it acquired, and what is its extent?

The people of the United States, in emerging from the war of independence, were the holders of extensive regions of country falling within the out-boundaries of the United States, as acknowledged in the definitive treaty of peace in 1783 with Great Britain. These rear or western lands were claimed by several States on the Atlantic, on the ground of exclusive title, in some cases from ocean to ocean, and in others to an indefinite extent in the wilderness.

These conflicting interests gave rise to controversies and discord. The State of New York, now the centre of trade and affluence on this continent, destined in her career of prosperity to reach a pinnacle of greatness second to no commercial power of the globe, readily yielded her claim to the undefined territory, and, responding to the appeals of the revolutionary Congress, all other like adverse interests were surrendered, whereby the proprietary title of the United States to these western lands became absolute and complete.

The United States held no public lands in any of the original thirteen States, except for public uses, fortifications, arsenals, light-houses, and dock-yards. Vermont was not a party, as a State, to the Union of 1776, her territory having been claimed by New York and New Hampshire, but was admitted as a State in 1791, while Maine, which had been claimed and governed by Massachusetts, did not enter the Union until 1820.

Kentucky was originally part of the Territory of Virginia, but in 1792 was admitted, having no public lands within her limits. Tennessee, which formed a part of North Carolina, became a State of the Union in 1796, but the general government now holds no public lands within the limits of that State, the same having been relinquished by acts of Congress.

Excluding the area of all the States above mentioned from the surface of the republic as it existed in 1783, with limits extending from the northern lakes to the thirty-first degree of latitude, and from the Atlantic to the middle channel of the Mississippi, the residue constitutes the public lands of that year, equal to about 354,000 square miles, or 226,560,000 acres.

The whole of this area, every acre of it, has been completely surveyed, and the field-notes recorded, while accurate plats have been protracted exhibiting in legal subdivisions the entire surface, and all in exact accordance with the rectangular system. That system stands in marked contrast with irregularities as to *form* in the landed estate of the parent country, in which, although under the direction of men of exalted sciences, a cadastral survey, after the lapse of centuries of civilization, has not yet been completed, it having been estimated in 1863 that it would require an appropriation of £90,000 sterling a year, for twenty-one years, to extend such survey over the whole of the British islands.

Having thus shown the extent of our public lands as originally acquired, it is now in place briefly to trace their extension to the present limits.

By the treaty of peace in 1763, between England, France, and Spain, it

was agreed that the western boundary of the Anglo-American colonies should be fixed "irrevocably" by a line drawn along the middle channel of the river Mississippi, thereby relinquishing, in favor of France, all the territory claimed by the latter in the region west of the Mississippi.

This line consequently was received in 1783 as our western boundary, but within twenty years thereafter, a greater statesman (Mr. Jefferson) than the king who had acceded to this restriction took means to strengthen our claim to the region beyond the Rocky Mountains, by restoring to us the important link of continuity westward to the Pacific, which had been surrendered by the treaty of 1763. He considered it coincident with the public law, particularly in view of the American discovery, in 1792, of the mouth of the Columbia, to order an exploration of the Missouri and its branches to their sources, so as to trace out to its termination on the Pacific some stream "which might offer the most direct and practicable water communication across the continent for the purposes of commerce."

This measure was originated before the ratification, on 31st October, 1803, of the treaty whereby the French republic ceded to us the ancient province of Louisiana.

The Florida cession of 1819 from Spain followed, and then the admission of Texas in 1846, retaining her public lands. The treaty of that year with England, and the Mexican cessions of 1848 and 1853, completed our south-western limits on the Gulf, the Rio Grande, thence westward to the Pacific, and giving us frontier on that ocean and Puget Sound of one thousand six hundred and twenty miles; said cession of 1848 adding to the sea line we had on the Gulf of Mexico, under the Spanish cession of 1819, four hundred miles of coast, extending from the mouth of the Sabine to the Rio Grande, thus making our sea-coast line on the Atlantic, Gulf of Mexico, and on the Pacific, equal to five thousand one hundred and twenty miles.

By these important acts the public lands have been increased in extent nearly seven times their area at the close of the last century, and are now seventeen times the surface of the kingdom of Prussia, including her territorial increase growing out of the recent war with Austria.

They are in still larger ratio greater in area than England, Wales, Scotland, Ireland, including the Channel Islands and the other British European possessions.

The area of our domain was estimated some years ago at upwards of 1,450,000,000 of acres, but is now found, by calculations based on more specific data, to equal 1,465,468,800 acres.

The soil of the flourishing States of Ohio, Indiana, and Illinois, once a part of the national territory, has nearly all passed into individual ownership. The undisposed of portions of the public domain, in greater or lesser extent, exist in the northern regions of the Lakes Huron, Michigan, and Superior; in the southern, east of the Mississippi and fronting on the Gulf of Mexico; in the tier of States having that river as an eastern boundary, and still further westward in all the other political communities, States, and Territories, stretching to and over the Rocky Mountains, the Cascades, and Sierra Nevada, extending to the Pacific slope, with that ocean as a frontier, and the rich mineral State lying immediately east of and adjacent to the two great States of the Pacific.

What is the system, founded in legislation, by which this half conti-

nent is so dealt with and required to be administered that our own people and immigrants who propose to enter the American family can secure rights to settlements with complete, absolute, and indefeasible grants?

It is by the establishment, in the first instance, of surveying departments, now ten in number, with sixty-one land districts, each, when in operation, having a register and receiver to file applications, and take the steps required by statutory provisions as preliminary to the acquisition of inceptive and complete title.

In our present system of surveying the public lands, the lines under the first ordinance started from eastern Ohio; afterwards advanced into the old Natchez settlement, in the present State of Mississippi, and now penetrate to the southernmost cape of Florida, sweeping around the Pacific coast, from San Diego to the Straits of Fuca. Ever growing and extending, they now cover an immense surface. This was not the work of a single period, but of years of congressional legislation, and anxious and patient thought on the part of those from time to time intrusted with the execution of the laws.

It is a subject of interest to trace the progress of the improvement of the system since the treaty of Grenville, of 1795, the first public act by which the Indian title to lands northwest of the Ohio river was extinguished.

For the better regulating the surveys, as well as for convenience of description, meridian and base lines were found necessary, and accordingly instituted and established by law. In later years, particularly since the act of reorganization in 1836, the General Land Office has had direct and full control of the surveying departments. The surveying service since the act of reorganization has taken rapid strides forward in the way of improving the system in all its branches, by the selection of the peaks of the highest mountains as initial points of base lines and meridians.

As the convergency of the meridians must exist, and it is impossible to make ordinary measurements mathematically correct, on account of the inequalities of the earth's surface, and the imperfection of instruments, it is not the practice, as in early times, to rely upon a single meridian and a base line to check the surveys, but what are called guide meridians and correction lines or standard parallels have been instituted, which are all run as nearly as human skill can effect it upon true meridians and parallels of latitude.

This system, in perfect accordance with the sphericity of the earth, secures uniformity and beauty in our surveys, particularly over a large surface, which by any other method it would be impossible to attain.

The system adopted for guide meridians is to run them at convenient intervals, making offsets at each standard parallel equal to the convergency, which may be readily calculated and offsetted, even in advance of the survey of the standard parallels. These parallels are run from the meridians and guide meridians, upon true parallels of latitude; one for every four or five townships in the high latitudes, as in Oregon and Washington, and from six to ten townships in the lower latitudes, while a set of township and section corners of the legal width, of six miles for each township, and one mile to each section, are marked and established thereon, without reference to the closing lines and corners of the townships and section lines south of the parallel, so as to take up and thus arrest the

convergency of the meridional lines of the surveys, inevitable in running from one standard parallel to the next succeeding one.

These delicate and widely extended operations require not only a theoretical knowledge of astronomical science, but also a practical acquaintance with all the instruments employed in field operations by the surveyors general, who have the direct control of them.

Among the most important surveying duties is the marking in the field of the lines and corners of the surveys in a distinct and durable manner.

These marks, when identified as the originals, placed there by the sworn deputy surveyor of the United States, constitute in fact the survey, taking precedence over field-notes, official plats, or any like evidence, controlling all future proceedings in re-survey, and respected accordingly in proceedings affecting title before the courts of the country.

The surveying laws and our system presuppose that occupants and others desiring to obtain titles from the Government are to have every facility in selecting and taking possession of the tracts they may purchase, and that in conforming their improvements to the marks they may find on the grounds, they may do so with the full assurance of their correctness, and that they cannot be disturbed by any future surveying operations.

Hence by the second section of the act of February 11, 1805, the corners and boundaries returned by the surveyor general are confirmed, and required to be taken and considered as the true corners and boundaries, and of these the field-notes and plats are merely the recorded description.

This system, so complete in itself, so simple and certain in fixing the lines upon the earth's surface, not only of town lots, but of agricultural lands, from 640, 320, 160, 80, and 40 acre tracts, has accomplished its work in Ohio, Indiana, Illinois, Michigan, Wisconsin, Iowa, Missouri, Arkansas, Mississippi, Alabama, and nearly so in Louisiana and Florida.

In these States are to be found climate, soil, and products equal to the wants and comforts of civilized man—cereals, esculents, and fruits in abundance, in the higher and in the middle latitudes, with the addition of the staples, tobacco and corn; while still further south are the cotton fields and sugar-cane, the orange, citron, and lemon.

Although the lines of the public surveys have been thus established, the system has yet further to advance upon the fields of Minnesota, northern and southern Dakota, in Montana, Kansas, Nebraska, Colorado, the Territories of New Mexico, Arizona, Utah, Idaho, Washington, and in the three great States, Nevada, Oregon, and California.

PRE-EMPTION LAWS.

The spirit of those enactments, first manifested in 1801, though checked three years afterwards, was developed in sixteen different statutes during the intervening period of forty years, and until 1841, when the prospective pre-emption acts of 1841 and 1843 were incorporated into our land legislation as a permanent policy, those laws reaching surveyed lands, offered and unoffered; later legislation extending the privilege to unsurveyed lands, with exceptions, from the Mississippi to the Pacific.

Then by the act of 3rd March, 1853, preference rights attach to alter-

nate even-numbered sections along the lines of railroads where settled upon and improved prior to final allotment of the granted sections, and to lands once covered by French, Spanish, or other grants declared invalid by the Supreme Court of the United States.

By act of 27th March, 1854, persons are secured in lands withheld for railroads where their settlements were made prior to the withdrawal from market.

The municipal town site law of 1844, the pre-emption provisions in the graduation act of 1854, gave way, the former to the town property and coal land legislation of 1864, 1865, the latter to the homestead statutes of 1862, 1864, 1866—the law of 30th May, 1862, intervening in regard to pre-emption and other important interests.

Property in land is among the first institutions of the State; its visible sign, the transformation it effects on the soil affording notice to others of the use of the tract appropriated, the settler identifying himself with it by the labor of his hands, and individualizing the same, as it were, by his own efforts.

In the progress of the system, which has conferred signal benefits upon settlers and the whole country, it is found that amendatory legislation is desirable to fix certain periods of limitation for consummating interests, and to generalize and give it greater efficiency. To this end, it is suggested that, in the case of settlements existing upon surveyed unoffered land, the settler shall, in all cases, file within three months from date of settlement, and establish his claim and pay up within twelve months from date of settlement; that where actual settlements may hereafter be made upon unsurveyed territory, the claimant, within three months after receipt at the district office of the township plat, shall file declaratory statement, and within twelve months thereafter prove up and pay for the tract; that there shall be a period of limitation fixed, within which appeals may be taken from the decision of the register and receiver and from that of the commissioner, and that where a right is initiated under the pre-emption laws it must in all cases, with limitation as to time, be consummated under those laws.

A legislative requirement to this effect would render each system, pre-emption and homestead, independent of each other, leaving them to work out their beneficial results without conflict, the settler always having the right, in the first instance, of choosing for himself under which of these systems he will make his settlement.

HOMESTEAD LAW.

The purpose of this measure is to hold out incentives for immigrants to identify themselves with the broad fields of the West, and secure their labor for such a period in the strength of manhood or maturity of life as will insure stability in settlements, development of arable resources, and steady increase of agricultural wealth.

This great original measure should stand unimpaired in its full vigor, and its results will continue to increase the producing power of the country. It has also been suggested whether the privilege should be enlarged by opening up unsurveyed lands to its operation.

We have large quantities of surveyed lands which are undisposed of, it

being the practice, as indicated in the foregoing, only to advance the lines where settlements are extending on arable lands. These fields, in genial climates and inviting localities, are now freely open to homestead settlements. We have surveyed acres enough to meet the demands of the multitudes that may settle upon them, each individual having the means of appropriating to his own use a farm marked out at large cost, and established with professional precision at public expense. A wise, liberal, munificent Government offers to every citizen, and to those who have taken the requisite step to become such—to the poor, the rich, all alike, a farm of liberal dimensions, and all at nominal prices, with the sole stipulation of five years' continuous settlement from date of entry. The labor called for is designed to operate directly to the advantage of the settler in making for him a comfortable home, and indirectly to the benefit of the country by adding to the aggregate wealth and prosperity of the republic. When the labor thus required is done, then the settler will get a fee-simple for 160 acres.

In well-settled communities an eighty-acre tract, well worked, is a handsome competence, so that, at the end of the five years' toil, the original settler may sell one-half of his tract, retain his farm, and in this way increase his active means, while in the progress of time and events, proceedings, under the impulse of necessity or interest, would lead to a duplication of the farms, and corresponding labor increase on the present surveyed domains.

In favoring measures that will concentrate settlements we give strength to local communities, and as the surveyed fields fill up, the surveyor, instruments in hand, will advance onward to establish his lines to meet increasing requirements.

The question has been raised in behalf of settlers whether a person who has availed himself of the benefits of the homestead, and pays for his claim under the eighth section of the act, can thereafter enter other land under pre-emption, provided he has never had the benefit of the latter statute.

On this point it has been ruled that where a party legally entitled makes an entry under the homestead law of May 20, 1862, and thereafter, at any time before the expiration of five years, shall come forward, make satisfactory proof of his actual settlement and cultivation to a given day, and then pay for the tract, the proceedings merely consummate his homestead right as the act allows; the payment being a legal substitution for the continuous labor the law would otherwise exact at his hands.

A claim of this character is not a pre-emption, but a homestead, and, as such, will be no bar to the same party acquiring a pre-emption right, provided he can legally show his right in virtue of actual settlement and cultivation on another tract at a period subsequent to the consummation of his homestead.

Cases have arisen where persons have made homestead settlements on unsurveyed tracts, and who, after the lines are established, find the premises falling in two different land districts.

The law restricts such settlements to surveyed lands, and hence, prior to survey, no rights attach under the statute. Then, as the law authorizes only one entry to be made by the same person, it is necessary for the party seeking the benefit of the statute to make the selection of his whole farm within one and the same land district. To entitle an applicant to enter

an adjoining tract for the use of a farm, he must both *own* and occupy the *original* farm tract.

In regard to certain classes of contests which have arisen for entries under the homestead, it has been ruled that where two persons apply at the same time for a tract on which neither has settlement and improvements, it must be awarded to the highest bidder—that is, to the party who will pay the highest price for the privilege of entering.

If two parties apply at the same time for a tract on which one of them has actual settlement and improvements, and the other has not, it must be awarded to the former, because it is not the policy of the system to allow one man to appropriate to himself the improvements resulting from the labor of another.

If a tract is simultaneously applied for by two persons, each having settlement and improvements on the same, an investigation is ordered, and if it is found that one has precedence by reason of prior actual settlement and substantial improvements, so as to be notice on the ground to any competitor, the award of entry will be made accordingly; but if neither has such substantial interests, the tract must be conceded to the highest bidder.

In reference to settlements on odd-numbered sections within the limits of withdrawals under railroad grants, the department in June last ruled that the homestead settler's right attaches only from the date of entry, the pre-emptor's from the date of his actual personal settlement. The title in either case is to be consummated by a full compliance with the terms and conditions imposed by law. The grant in aid of the railroad does not embrace lands to which a valid right arising either under the homestead or pre-emption had previously attached; but if such right be abandoned or forfeited, the grant would immediately thereafter take effect; that a pre-emptor cannot change his claim to a homestead entry so as to defeat the right which may have inured to the railroad company before the individual entry was made. If a pre-emption settlement had been commenced upon surveyed lands, it might be entered as a homestead before the right of the company attached, but not at a subsequent date. This ruling has been duly communicated for the government of the district land officers.

CITIES AND TOWNS ON THE PUBLIC LANDS, ACTS JULY 1, 1864, AND
MARCH 3, 1865.

Since the passage of the act of July 1, 1864, "for the disposal of coal lands and of town property in the public domain," proceedings have been initiated to obtain title to the lots lying within the limits of the following towns and cities founded on the public lands, to wit: Petaluma, Mountain View, and Vallejo, in California; Gold Hill, Mineral City, Empire City, Virginia City, American City, Genoa, Washoe, and Austin, in Nevada; Prescott and Colville, in Arizona; Mount Vernon and Pueblo, in Colorado; Otoe, in Nebraska; Yankton, in Dakota; and Warm Springs and Stockton, in Utah.

Some of these municipalities are thriving marts of trade, having had existence as corporations since 1851, containing a population at the present time of several thousand inhabitants.

In some few the proceedings to obtain title to lots are vigorously conducted; while in most of them, only the first steps have been taken. This is owing to some extent to an imperfect understanding of the law on the part of many, and partly to delays always incident to proceedings under an entirely new enactment.

Pursuant to the act of May 23, 1844, the United States made title for the entire site of any town or city to the corporate authorities thereof, or the judge of the county court, in trust for the benefit of the inhabitants of the town or city, according to their respective interests, and confided the execution of the trust, as to the disposal of the lots or the proceeds thereof, to the legislative authority of the State or Territory in which the same might be situated.

The act of July 1, 1864, repealed the act of 1844, and provides for making title by the United States, to the several lots embraced in any town or city, directly to the purchasers or occupants of the same.

Under the act of 1844, a town site was limited to a maximum of 320 acres, and the price was the usual minimum of \$1 25 per acre. According to the act of 1864, the maximum for a site is 640 acres, and the minimum price \$10 each for lots not exceeding in area 4,200 square feet.

The supplemental act of March 3, 1865, removed these restrictions as to the size of sites and lots in reference to all towns or cities existing at that date on the public domain, and provided for making title to the same, of such area as they actually possessed at the passage of the act; the minimum price of lots exceeding in size 4,200 square feet to be subject to such reasonable increase as the Secretary of the Interior might establish.

In pursuance of the authority thus given, the Commissioner of the General Land Office, under the direction of the Secretary, by circular dated October 20, 1865, prescribed the following minimum prices, to wit: For each lot containing over 4,200 square feet and not more than 12,600 square feet, eighteen dollars; for each lot containing over 12,600 square feet and not more than 16,800 square feet, twenty dollars; and for larger lots the price to be increased two dollars for every additional 4,200 square feet.

In the case of out-lots in any such city or town the minimum of such out-lots to be ten dollars for the first acre and five dollars for each additional acre in such lot.

Instructions have been issued by this office to the registers and receivers of the various land districts, explaining the provisions of these acts, and it is believed they are now generally understood.

By the act of July 1, 1864, it is "provided that any actual settler upon any one lot as aforesaid, and upon any additional lot in which he may have substantial improvements, shall be entitled to prove up and purchase the same as a pre-emption, at said minimum, at any time before the day fixed for the public sale."

The registers and receivers of the local offices have been instructed that, under this proviso, any actual settler may pre-empt the lot upon which he resides, with one additional lot upon which he has substantial improvements; that no more than two lots can be pre-empted by any one settler; and that the persons claiming the benefit of this proviso must be actual residents of the town or city in which the lots claimed may be situated,

and must have the personal qualifications required by the general pre-emption laws.

The General Land Office holds that this limitation is clearly to one additional lot, and no more; that, had the legislative mind intended otherwise, the word *lots* would have been used instead of *lot*, as it now stands in the statute, but that the department will, in cases where expensive municipal or business improvements, as mills, warehouses, furnaces, machine shops, &c., are shown to exist, take care that no such interests shall suffer by the intrusion of an adverse claim, or purpose to purchase to the prejudice of the owner of such interest, such protection of course to be subordinate to the requirements of law in regard to public sales.

The substantial improvements for the purposes contemplated in this statute are understood to mean permanent buildings or works for municipal use; a mere enclosure by temporary fence for gardening or other incidental use not being considered as satisfying this requirement of law.

In some sections of the country cases of hardship have arisen under the provisions of the statute, and particularly on the Pacific slope, where some of the towns, the claims of which are pending under the acts of July 1, 1864, and March 3, 1865, have considerable population and are located upon old Mexican or Spanish grants but recently declared to be invalid, and where it is represented that many persons own more than two lots each, purchased oftentimes at great expense, and containing valuable improvements, upon which the claimants have paid taxes and received rents for many years, without any question ever having been raised as to their title.

It is claimed that to limit such persons to a pre-emption of but two lots, and to expose to sale other lots worth oftentimes thousands of dollars, and compel them to purchase the second time at their market value, or even to suffer them to pass into other hands without the consent of those who had held them under a title recognised as valid, in many cases for more than fifteen years, would be an act of great injustice.

It is also contended that in most of the new towns of the West, many of the lots and improvements are owned by persons residing elsewhere; that many of the miners in the western Territories purchase lots in the neighboring towns with the view of making their future residences upon them; and that where none but actual *residents* are allowed to pre-empt lots they must necessarily suffer loss, which in mining towns is oftentimes considerable, unless provision is made, which is recommended, to relieve this particular class of cases, and also to relieve the class possessing more than two lots, where the excess lot is covered by valuable improvements.

The aforesaid act of 1864 declares that where parties have founded or may desire to found a city or town on the public lands, it shall and may be lawful "for them to cause to be filed with the recorder for the county in which the land is situated a plat thereof for not exceeding 640 acres, describing its exterior boundaries," giving the name of the city or town, and exhibiting the streets, squares, blocks, lots, and alleys, the size of the same, with measurements and area of the municipal subdivision, the statement of the extent and general character of the improvements, the map and statement to be verified under oath by the party acting for and in behalf of the persons proposing to establish the city or town, and within one month after the filing there shall be transmitted to the General Land

Office a verified transcript map and statement, accompanied by the testimony of two witnesses, that such city or town has been established in good faith.

It is further required that the exterior lines of the whole city be run and established by *actual survey*, to be perpetuated by permanent visible objects, and said actual lines by a scientific surveyor must be shown on the map with the exact measurement of the exterior lines, and also of the municipal subdivisions as specifically designated in the statute.

The verified manuscript map is required to be sent to this office with an authenticated copy of the field-notes of survey. The map of survey must also be accompanied by the sworn statements of the parties as "to the extent and general character of the improvements," and with it should be transmitted a general map of the region, indicating the locality of the town site as near as possible to some prominent place in the geography of the country.

A point has been made as to the hardship of requiring municipal settlers to pay the cost of survey, while non-residents are permitted to purchase within the limits of a town who may not have contributed to the payment of the expense of such survey. This objection is obviated by restricting the survey to the area applied for by the settlers; yet should there be surplus lots not claimed, the sale of them would enhance the value of the settlement, as increase of population is increase of the productive power, thereby offsetting any inconsiderable outlay originally incurred in founding the city.

COAL LANDS.

The act of July 1, 1864, "for the disposal of coal lands and town property in the public domain," confers authority for offering at public sale to the highest bidder, in suitable legal subdivisions, portions of the public domain embracing coal beds or coal fields at a minimum price of twenty dollars per acre, any lands not thus disposed of to be thereafter liable to private entry at that minimum.

The supplemental act of March 3, 1865, provides, in the nature of a special pre-emption, for entering coal lands at that minimum, in quantities not exceeding one hundred and sixty acres, by citizens of the United States, *bona fide* engaged at the date of the act in the business of coal mining on the public lands, for the purpose of commerce.

A few entries of coal tracts have been made in California, in the counties of Contra Costa and Alameda, under the supplemental act of March 3, 1865, and are now undergoing official examination.

The coal of these mines is said to be excellent, and the market demand for it unlimited. It is quite apparent, however, that there are many places embracing coal beds and coal fields where the supply of coal is neither so extensive nor the quality so good, yet in which the scarcity of timber for fuel, and other causes, will lead to its being mined for the purposes of commerce. There are doubtless mines of this character which were thus worked at the date of the supplemental act, the claimants of which have taken no steps to enter them pursuant to that law.

Whilst the lands subject to entry under these acts are of every variety of value, from the best coal lands, in convenient localities, to those of the most inferior quality, in almost inaccessible places, the minimum at which

the same may be entered is fixed by the act at the same sum. It is worthy of consideration whether an amendment providing for the reduction of the twenty-dollar minimum might not be productive of good in cases where the veins of coal are thin, the quality inferior, or the labor of extracting it unusually great. This might be done by vesting power in the head of the department for making such reduction, where the facts in his judgment would justify.

The better to carry into effect the act of July 1, 1864, this office, on the 20th of August following, issued instructions to the surveyors general, and the registers and receivers of the different land districts, requiring them to institute proper inquiries as to the mineral character of the lands in their respective districts, to ascertain what tracts come within the meaning of the terms "coal beds" or "coal fields," and to report results.

On the 20th of April, 1865, further instructions were issued as to proceedings under the supplemental act of March 3, 1865. It is found that the information called for as to the quantities of land embracing coal beds or coal fields in the respective land districts can be but imperfectly furnished through the instrumentality of officers whose time is absorbed with other duties; yet from reports received, and other reliable sources, it is ascertained that coal is distributed in the public domain in large quantities. In Michigan, Ohio, Indiana, Illinois, Missouri, Iowa, and Alabama, its existence has long been known, and in many places it has been extensively mined for commercial purposes. In Arkansas, Louisiana, Kansas, and California, numerous deposits of a superior quality have been discovered, whilst in Nevada and Oregon, and in the Territories of Washington, Idaho, Montana, Utah, Colorado, Dakota, New Mexico, and Nebraska, coal traces have been found within the last few years, indicating an abundant distribution. The coal field of Iowa and Missouri, passing through the eastern portions of Nebraska and Kansas, and the western part of Arkansas, extends diagonally through Texas and enters the republic of Mexico. The western limit of this extensive field is reported to lie about the 97th degree of west longitude, where the limestone formation is succeeded by the red saliferous sandstone. East of this meridian, in the extensive limestone formation, the great mineral coal measures occur, covering large portions of the States of Iowa and Missouri on the west of the Mississippi, and Illinois, Indiana, Ohio, and other States on the east of that river, and appearing in numerous traces in the regions bordering on the Nemaha, the Neosho, the Arkansas, and Canadian rivers.

Beyond the plains, along the base of the Rocky Mountains, and extending from the northern limits of New Mexico, through Colorado, and north of it to the Canada line, passing through Idaho, Oregon, and Washington, are the tertiary coal measures of the United States, containing many varieties of brown coal, useful not only for the ordinary purposes of fuel, but much of it excellent for steam navigation purposes.

These deposits are destined to be of immense importance in the future settlement of those extensive regions. Evidences are already quite numerous of its distribution in inexhaustible quantities along the headwaters of the Missouri, the Yellowstone, Big Horn, Powder, Platte, Greene, Columbia, and Willamette, and their tributaries. Bituminous coal of excellent quality exists in the Raton Mountains and other parts of New Mexico, in Nevada, and in Utah.

As the public surveys and settlements advance and increase in the now unsurveyed lands of the United States, the wants and exigencies of our people will, from time to time, bring to light further discoveries of this element of power and progress that now lies dormant in distant and imperfectly explored places.

The wealth of this country in the article of coal is beyond estimate.* This combustible substance is spread by the hand of Providence everywhere in such localities as to make it best subservient to the wants of our race, whose genius has developed and is continually applying its resistless forces.

Geology teaches that the primeval forests, and myriads of lesser vegetation, in the decay of ages, are changed by the secret agencies of nature into this important substance, and packed away in the earth for the use of man.

The aggregate area of the coal fields of the British North American Provinces, of Great Britain, France, Belgium, Rhenish Prussia, Westphalia, Bohemia, Saxony, Spain, and Russia, is reported as equal to sixteen thousand four hundred and ninety-four square miles, whilst the extent of those discovered in past years in the United States is estimated at two hundred thousand square miles. An able English writer, in discussing the bearings of this mineral fuel and the extent of it in the United States, declares that the possession of such an amazing deposit leads to the forecast of a future of almost boundless enterprise and production in America, describing it as a "fuel ever ready at a moment's preparation to generate a power the very opposite of man's nature, a power that transcends all others, yet known to be applicable to mechanical movements, that disdains narrow improvements, and wings us or wags us over land or sea, that makes tens of thousands of wheels and spindles to revolve incessantly, that causes raw materials to be wrought into airy fabrics or solid structures, or that transports navies and armies, changes the character of warfare by accelerating the transfer of men and the munitions of war, decides the fate of battles, and determines the destiny of nations." Such is the agent abounding in the public domain, and everywhere accessible in our country, and which is now laboring in our machine shops, in our manufacturing establishments, whilst it is driving over our inland waters vessels of every size from a steam-tug to floating palaces, and is speeding to distant lands our ocean marine engaged in foreign trade, and carrying into every sea and every prominent port the huge and resistless engines of our naval forces, which attest the genius of this people and are symbols of our national power.

Interspersed with this valuable deposit are most of the other useful minerals upon the presence of which the wealth and prosperity of a nation measurably depend. The precious metals are deposited in three broad belts, stretching across the United States, one known as the "Appalachian gold field," traversing the older States of the Union in a line parallel with the Atlantic coast, and appearing in Virginia and North Carolina; the other as the "Rocky Mountain gold field," traversing all the more recently organized Territories of the United States, and the third as the

* Surface indications of coal meet the eye almost everywhere. The bituminous coal fields around Pittsburgh have been estimated at eight million six hundred thousand acres. The upper and lower beds are estimated to contain fifty-three thousand five hundred and sixty-two millions of tons of coal.—*Sir Morton Peto, Resources of America*, page 180.

"Sierra Nevada gold field," extending through the country bordering on the Pacific.

Iron, the most useful of all metals, is at the same time the most generally distributed through the public land States* and Territories, whilst there is copper in immense quantities in the vicinity of the lakes east of the Mississippi, existing likewise in greater or lesser degree in the region extending from the Mississippi Valley to the Pacific, whilst lead, tin, and zinc are found in several of the States and Territories. The precious metals exist chiefly in California, in Nevada, in northeastern and southwestern Oregon, in Washington Territory, in Idaho, Montana, Colorado, southern Utah, New Mexico, and Arizona, scattered over an estimated area of a million square miles, and now yielding an annual product in gold and silver, according to the best attainable estimates, of over one hundred millions of dollars; California alone having produced in the precious metals since 1848 over one thousand millions of dollars, while the developing mines of Nevada, Colorado, Idaho, Montana, New Mexico, and Arizona are making large annual additions to the American yield of gold and silver.

PETROLEUM.

It appears from a semi-official report, in June last, received from the Surveyor General of California, that the petroleum oil belt extends in that State from the county of Humboldt on the north to Los Angeles on the south, a distance of over 700 miles, embracing twelve counties, to wit: Humboldt, Mendocino, Colusa, Sonoma, Contra Costa, Santa Clara, Santa Cruz, Monterey, San Luis Obispo, Santa Barbara, Los Angeles, and Tulare, in which oil in limited quantities, and some of superior quality, has been discovered; in fact, that the sandstone and shale of the whole coast range of mountains in most of these counties is so strongly saturated with petroleum oil as to burn in a furnace, being easy of excavation and assuming the appearance of tar or asphaltum where exposed to the air. It is found in some localities, particularly in the southern counties, in a fluid state, flowing out of the shale rocks in small rills, known by the residents as breor springs, chiefly in the cañons or gulches. The asphaltum or hardened oil exists in very large quantities on the surface, the formation of centuries, as supposed, and is used for fuel. One of the most remarkable springs mentioned is situated under the ocean, some three miles from the shore, opposite San Luis Obispo, and north of Point Concepcion, which, in calm weather, is said to cover the surface of the sea with oil for twenty miles; and another curious feature is found about six miles from Los Angeles, in the plain known as Tar Lake, from fifty to one hundred feet in diameter, which is filled with oil-tar, used by the inhabitants for roofing houses and other purposes.

Various experiments, it appears, have been in progress for obtaining the oil from the immense deposits of asphaltum and tar, extracting it from the sandstones and from springs by boring, which have met with partial success, but sufficient to warrant the belief that at no distant day a full supply may be obtained when adequate capital and machinery shall be applied.

(To be Continued.)

* It is estimated that there is iron ore enough in Missouri alone to supply a million tons per annum of manufactured iron for the next two hundred years.—*Sir Morton Peto*, page 167.

CHICAGO AND NORTHWESTERN RAILWAY.

The third fiscal year of this consolidation expired May 31, 1867. The earnings and expenses yearly, as show in the reports of the company have been as follows :

	1864-65.	1865-66.	1866-67.
Passenger earnings.....	\$2,167,901 77	\$2,510,727 52	\$2,945,016 19
Freight	4,448,598 57	5,292,191 80	6,049,359 51
Express	90,046 97	157,157 80	846,016 37
Mail	67,885 91	77,680 21	124,455 27
Miscellaneous.....	46,317 53	106,103 86	96,637 51
Total gross earnings.....	\$6,830,749 75	\$8,943,840 93	\$10,161,785 45

From which must be deducted cost of operating and taxes, local and national, as follows :

Cost of operating.....	\$4,286,473 86	\$5,072,969 94	\$6,794,265 45
State, county and town taxes.....	168,119 91	249,489 99	266,421 57
U.S. tax on earnings, and stamps.....	157,769 07	204,684 12	113,301 18
Total cost and taxes.....	\$4,612,362 84	\$5,527,083 45	\$7,163,988 20
(Percentage of cost, &c.....	67 73	67 04	69 91)

Earnings less expenses.....	\$2,199,887 91	\$3,716,756 68	\$3,067,743 25
-----------------------------	----------------	----------------	----------------

Disbursed in the following directions, viz :

Interest on bonds and debt.....	\$750,470 00	\$940,323 40	\$1,142,900 07
Sinking funds on bonds.....			
Dividend on B. & M. R.R. stock outstanding January 1, 1866.....		65,120 00	59,120 00
Interest on C. & M. RR. bonds and dividend on stock, in accordance with terms of lease.....		3,473 45	
Rents of Iowa leased railroads.....	397,115 98	518,531 93	132,423 95
Dividend on preferred stock.....	373,873 15	447,135 33	983,000 00
Surplus income.....	678,929 78	742,193 83	103,067 29

The surplus as above has been reduced by charging against it certain interest and discounts, properly chargeable to construction, viz.: in 1864-65, \$521,826 19; in 1865-66, \$415,799 20, and in 1866-67, \$117,831 05, making a total of \$1,054,956 44; which, deducted from the aggregate surplus (\$1,523,180 90), leaves May 31, 1867, \$468,223 46 as the surplus actually carried to the general account.

The length of line operated, and the stock of engines and cars on the road have been largely increased during the period which the above accounts cover. The following statement shows these at the date of the consolidation in June, 1864, and at the close of each subsequent fiscal year :

	June, 1864.	1865.	1866.	1867.
Clinton line.....	123 1	138 1	138 1	138 1
Iowa leased lines.....	189 0	204 0	204 0	332 9
Freeport line.....	318 1	342 1	342 1	491 0
Wgin-Richmond line.....	91 0	91 0	91 0	91 1
Keokuk-Madison line.....	38 0	38 0	39 0	83 0
Rockford-Kenosha line.....	49 5	67 6	67 6	67 6
Chicago-Green Bay line.....	72 4	72 4	72 4	72 4
Chicago-Milwaukee line*.....	242 4	242 4	242 4	242 4
Peninsula Railroad†.....			83 5	83 5
		70 0	71 5	71 5
Total miles operated.....	806 4	990 5	1,003 5	1,153 4

The change in the rolling stock from June 1, 1865, to June 1, 1867, is shown in the following statement :

	No. of engines.	Number of cars				Orc.	Total.
		Pass.	Caboose.	Eng., &c.	Freight.		
1865.....	154	94	83	75	2,773	214	3,339
1867.....	243	133	117	101	4,515	579	5,658
Increase.....	89	39	34	26	1,742	365	2,319

* Leased May 8, 1866.

† Consolidated October, 1864, and opened through December, 1864.

The business of the road is not given with sufficient detail. From the reports, however, we collect the following information :

	1864-65.	1865-66.	1866-67.
Passengers carried.....	1,006,697	1,511,969	1,533,096
Freight (tons of 2,000 lbs.).....	956,484	1,270,515	1,736,930

The financial condition of the company on the 31st May yearly, as exhibited on the general account, is shown in the following statement :

	1865.	1866.	1867.
Common stock.....	\$13,160,921 18	\$13,174,901 18	\$13,232,635 61
Preferred stock.....	12,994,719 79	13,019,055 79	14,789,125 61
Funded debt.....	12,020,483 87	14,051,000 00	16,251,000 00
Net floating debt.....	895,898 44	277,150 85	1,188,478 15
Income account.....	157,608 59	483,983 22	468,234 46
Total.....	\$29,522,849 47	\$41,006,096 04	\$45,864,233 84

Against which are charged the following, viz :

Property as per terms of consolidation	\$24,870,931 98	\$25,079,585 25	\$25,272,514 59
New construction	839,508 91	1,269,940 09	1,770,353 29
New equipment	1,102,024 40	1,539,985 02	4,525,399 59
Securities on hand, viz.:			
Sinking fund, 2d mort. G. & C. U. RR. bonds.....	34,500 00	253,000 00	253,000 00
Green day transit stock, &c.....			274,204 00
Chic. & Milwaukee RR. stock.....	1,274,350 00	1,274,350 00	2,918,300 00
Other stocks and bonds.....	31,978 44	361,350 77	44,193 19
Materials on hand.....	1,015,983 06	1,208,635 91	1,363,153 78
Total.....	\$29,322,848 99	\$41,006,096 04	\$45,864,233 84

The details of the several securities issued, and the amounts outstanding at the close of each fiscal year, are given in the following summary :

	1865.	1866.	1867.
6's, Flag Trust Bonds (Depot).....	\$345,000 00	\$345,000 00	\$300,000 00
7's, pref. sinking fund b'ds (G. & N. W.).....	1,250,000 00	1,250,000 00	1,250,000 00
7's, Appleton exten'n b'ds (do).....	184,000 00	184,000 00	184,000 00
7's, Green Bay " (do).....	800,000 00	800,000 00	800,000 00
7's, funded coup. int. " (do).....	755,000 00	755,000 00	755,000 00
7's, gen. 1st mortgage " (do).....	3,000,000 00	3,000,000 00	3,000,000 00
7's, 1st mortgage bonds (G. & C. U.).....	1,968,000 00	1,968,000 00	1,919,000 00
7's, 2d " (do).....	1,311,000 00	1,223,000 00	1,173,000 00
6's, Elgin & State line " (do).....	189,000 00	189,000 00	189,000 00
7's, Miss. Riv. Bridge " (do).....	200,000 00	200,000 00	200,000 00
7's, Equipment bonds (G. & N. W.).....	270,453 87	280,000 00	165,000 00
7's, 1st mort. bonds (Pen. R. R.).....	1,090,000 00	1,200,000 00	1,075,000 00
7's, consol. s't'g'd b'ds (G. & N. W.).....	943,000 00	2,637,100 00	3,040,000 00
10's, Equipment bonds (do).....			2,200,000 00
Total	\$11,020,483 87	\$14,051,000 00	\$16,251,000 00

For the general history of the company the reader is referred to the *COMMERCIAL AND FINANCIAL CHRONICLE*, vol. 1, p. 618, 646 and 711.

Below we give the monthly range of sale prices of the stocks of the company since the consolidation :

	Common stock			Preferred stock		
	1864-65.	1865-66.	1866-67.	1864-65.	1865-66.	1866-67.
June.....	50 @60	23 @27	23½ @31½	86 @94½	53 @57	53 @61½
July.....	48½ @58	26 @30½	80 @37	84 @93	56½ @64	59 @65½
August.....	53½ @57½	26 @30	85½ @37½	86½ @91½	58½ @64	63 @65½
Sept.	44½ @54	27½ @29½	84 @37½	77 @86½	60½ @64	65½ @71½
Oct.	34 @46	29½ @34½	88 @60½	67½ @81	64½ @60	73½ @81½
Nov.	40½ @47½	31 @39½	87½ @63½	75½ @85½	64½ @60	60½ @68
Dec.	38 @44½	34½ @37½	43 @55½	69½ @78½	61 @63½	65½ @74½
Jan.	33 @40½	27 @36½	84 @46½	81½ @71½	53½ @63½	57½ @63½
Feb.	38½ @57	26½ @32½	85½ @39½	61½ @67½	55½ @56½	63½ @63½
March.....	20 @34	25 @37½	81½ @39½	48 @54	52 @57½	59½ @61½
April.....	21½ @35½	24 @30	80 @36½	48 @57	52½ @59½	56½ @61½
May.....	21½ @38	26½ @30½	81½ @39½	59 @63½	55½ @61½	56½ @60½
Year.....	20 @60	23 @39½	23½ @63½	48 @94½	53 @69	56½ @84½

These stocks have been increased yearly as follows:

	Common.	Preferred.	Total.
1984-85.....	\$1,150,458	\$4,664,343	\$5,714,706
1985-86.....	18,960	24,386	33,314
1986-87.....	57,494	1,770,070	1,827,564

No dividends have been paid on the common stock. On the preferred stock a dividend of 8½ was paid Dec., 1864, and again June, 1865. No further dividend was paid until December, 1866, when a 7 per cent dividend was paid on the preferred stock in kind.

SOUTHERN RAILROAD REPORTS.

1. *North Carolina*—2. *North Eastern*—8. *Mississippi Central*.

NORTH CAROLINA RAILROAD.

The fiscal year ends May 31. The gross earnings of this railroad for the years ending as above, in 1860 and 1867, compare:

	1860-61.	1865-67.
Passenger earnings.....	\$183,684 49	\$301,761
Freight.....	215,477 40	301,980
Mails, ".....	23,800 00	14,886 66
Total gross earnings.....	\$422,961 89	\$618,556

Total gross earnings	\$490,661 89	\$518,559 81
-----------------------------------	---------------------	---------------------

The general business of the company for the year 1866-67 is shown in the following statement :

Assets on hand May 31, 1936.....	\$445,579 11
Old drafts collected this year	405 03
undry deductions on negro bonds and other war claims passed to profit and loss.	24,830 24

Gross earnings from transportation.....		70,804 40
Amount received from rents.....	\$5,886 70	518,558 86
do do from shop accounts.....	5,368 70	
do do from sale of old iron.....	44,986 02	
do do from sale of supplies.....	18,888 88	
do do from minor sources.....	7,635 91—	
Increased liabilities.....		70,840 13
		\$7,401 67

Total resources for year.....\$1,096,405 07

Charged with the following disbursements, viz :

Ordinary and extraordinary expenses—old.....	\$344,828 49	
—new.....	446,123 84	690,456 33
Construction (old) \$2,381 85, and right of way, \$1,000.....		3,381 85
Worthless accounts passed to profit and loss.....		332,783 45
Bills receivab ^e \$3,857 57, and accounts current.....	44,850 48	51,307 79
Cash on hand May 31, 1897.....		18,637 15

Total disbursement.....	\$1 096,405 07
--------------------------------	-----------------------

The financial condition of the company at the close of 1866-67, reads as follows :

Capital stock.....		\$4,000,000 00
Eight per cent loan, due March 1, 1897.....	\$539,000 00	
Interest on "do".....	19,690 00	558,690 00
Loans at 8 per cent. on demand.....		173,690 00
Bills payable.....		90,774 98
Current accounts.....		61,854 83
Due on negro bonds, 1864 and 1865.....		79,743 67
Profit and loss.....		596,608 24

Total capital and liabilities.....	\$5,900,425 00
---	-----------------------

Against which are charged as follows, viz :

Cost of road, equipments and real estate	\$4,980,735 63
Amount of sinking fund	\$304,000 00
Stock in Bhamam Railroad Company.....	44,444 44
Stock in North Carolina Railroad Company.....	21,400 00
Bills receivable (\$4,357 87) and current accounts	269,944 43
Cash on hand	61,307 79
	18,687 16

Total property and assets.....	\$5,290,485 00
--------------------------------	----------------

NORTHEASTERN (S. C.) RAILROAD.

The fiscal year ends February 28. The receipts and expenses for 10 years (not including 1864-65) were as follows :

Year ending Feb. 28.	Gross earnings.				Operating expenses.	Net earnings.
	Passeng'r's.	Freight.	Other.	Total.		
1867.....	\$15,860 90	\$15,485 38	\$1,558 94	\$32,905 22	\$.....	\$.....
1868.....	43,644 44	47,888 50	9,875 51	101,408 45	61,133 01	40,275 44
1869.....	78,739 24	108,371 48	33,063 04	220,173 76	123,888 98	96,284 78
1870.....	80,438 54	149,783 27	37,903 18	268,124 99	154,850 73	113,274 26
1871.....	80,045 05	137,168 85	37,494 43	254,708 33	159,411 95	95,296 38
1872.....	65,355 18	98,050 93	85,143 99	248,550 10	134,247 73	114,302 37
1873.....	104,310 53	82,713 11	943,491 57	1,030,515 21	141,923 12	888,592 09
1874.....	232,383 85	308,557 74	235,433 08	776,373 67	337,230 93	439,142 74
1875.....	.....	.....	(No report made this year)	.....	.....	.....
1876.....	68,383 75	96,345 47	18,636 32	183,365 54	131,551 49	51,814 05
1877.....	120,018 40	176,361 51	21,455 44	317,775 35	261,138 04	56,637 31

The length of this road is 108 miles, extending from Charleston to Florence, and a connection with the Wilmington and Manchester Railroad. At the commencement of 1856-57, it was completed to Monk's Corner, 29½ miles north from Charleston. At the close of that year it was open to the Santee River, 48½ miles; the average mileage operated in 1856-7 having been 38.86 miles. The whole road was opened to traffic on the 5th August, 1857.

The financial condition of the company on the 28th February, 1860, 1866 and 1877, comparatively, is shown in the following statement :

	1860.	1866.	1877.
Stock capital in \$50 shares.....	\$397,300 00	\$398,000 00	\$398,000 00
1st mort. bonds (7s) due Sept. 1, 1869.....	700,000 00	700,000 00	700,000 00
2d " " (7s) due Sept. 1, 1868.....	105,800 00	145,000 00	145,000 00
Prof. stock (3s)* due May 1, 1875.....	104,300 00	155,000 00	155,000 00
Bonds for real estate.....	43,910 00	23,000 00	23,000 00
Bills payable, notes, &c.....	105,590 56	45,380 80	27,839 79
Open accounts.....	8,184 85	55,135 45	14,798 25
Cash due by company.....	.....	11,343 23	.....
Interest outstanding.....	.....	120,535 25	173,267 73
" funded into certificates.....	.....	.....	54,818 50

Total capital and liabilities.....\$2,054,985 41 \$2,158,933 38 \$2,192,200 24

Against which are charged as follows :

Cost of road and property.....	\$1,931,051 91	\$2,095,176 87	\$2,143,139 65
2d mortgage bonds.....	50,800 00	.....	.....
Stock in Oheran & Darlington R.R. (par \$35,400).....	22,597 40	4,004 00	4,004 00
Stock in Florida Steam Packet Co.....	6,000 00	.....	.....
Real estate.....	11,984 41	26,126 04	23,239 04
Post office dues.....	18,184 88	.....	1,265 12
Bills receivable.....	2,505 12	3,987 50	3,787 50
Open accounts.....	.....	21,265 28	.....
United States .....	.....	5,254 24	.....
Cash.....	10,932 19	.....	14,671 05

Total property and amounts.....\$2,054,985 41 \$2,158,933 38 \$2,192,200 24

The overdue interest amounting at the close of 1866-67 to \$175,267 73, is fundable into certificates of indebtedness. The total amount to date was \$232,249 50, of which \$5,163 27 was retired in settlement of freights, and \$52,818 50 by funding. These certificates bear 7 per cent. interest, payable semi-annually, and are payable January 1, 1875. Interest is now paid as it becomes due.

MISSISSIPPI CENTRAL RAILROAD.

The fiscal year of this company closes August 31. At the commencement of the

*Secured by the deposit of a corresponding amount of 2d mortgage bonds in the hands of trustees.

year 1865-66 trains were running north only as far as Abbeville. On the 20th September the bridges were completed to Holly Springs, and on the 15th November the line was opened to Grand Junction. On the 6th January trains were run to Bolivar, and on the 18th May to Jackson; but it was not until the 17th June that connection was made with the Mobile and Ohio Railroad. The business of the road was also interrupted by want of rolling stock. Under these conditions the company accomplished but a small quota of the business of which the road with a sufficient equipment is capable.

The following statement exhibits an account of the earnings and expenses for the year :

EARNINGS.		EXPENSES.	
Passenger receipts.....	\$187,480 23	Conducting transportation.....	\$74,874 23
Freight ".....	307,788 94	Way, \$97,901 77; engines and cars,	
Mail ".....	19,071 53	\$73,610 18.....	170,511 95
Other ".....	450 00	Fuel, \$84 023 72, and sundries \$28,	
		878 16.....	63,401 95
Total receipts.....	\$604,790 70	Total expenses.....	\$307,788 13
			297,002 57
Balance to credit.....			

The balance sheet of the company, dated Sept. 1, 1866, reads as follows:

Capital stock and dividend of Oct. 6, 1865.....		\$2,949,221 7
Sinking fund.....	\$200,000 00	
Contingent fund.....	200,000 00	
Profit and loss.....	837,536 37—	787,536 37
Earnings 1st September, 1865, to date.....		604,790 70
First mortgage bonds.....	\$1,196,896 66	
Second ".....	1,115,400 00	
Income ".....	87,550 00	
M. C. & T. R. R. ".....	71,000 00	
State of Tennessee.....	938,980 00—	3,393,836 66
Circulation in change bills.....	210,161 50	
Bills payable.....	368,835 67	
Open accounts and pay rolls.....	304,009 60—	882,996 77
Total capital and assets.....		\$3,568,371 97

Against the above are charges as follows, viz :

Construction account.....	\$5,776,794 02	
Equipment.....	769,436 99—	6,546,161 01
Reconstruction since Sept. 1, 1865.....		607,854 48
Interest on M. C. & T. R. R. bonds.....	\$7,823 28	
" Preferred stock.....	37 43	
" Tennessee bonds.....	176,849 40	
" Income bonds.....	152,328 16	
" First mortgage bonds.....	217,644 17	
" Second mortgage bonds.....	655 93	
" Floating debt.....	112,512 74—	675,060 76
Expenses 1st September, 1865, to date.....		307,788 13
Tennessee bonds.....	\$225,000 00	
Cash in hands of Treasurer.....	18,846 65	
Real estate, bills receivable, and other available means.....	188,160 94—	432,007 59
Total property and assets.....		\$3,568,371 97

With regard to the funding of interest coupons, it may be stated that the State of Tennessee has agreed to take bonds at 6 per cent. for her share, and at the same time a State loan of \$200,000 was granted. The coupons of the company's bonds will also be funded as rapidly as possible. It is expected that the income of the current year will be adequate to provide for accruing interest.

MANUFACTURE OF PERFUMERY.

From an interesting paper upon the cultivation of flowers and the manufacture of perfumery at Nice, France, by Mr. A. O. Aldis, United States consul at that port, we learn that the export of perfumery from Nice, Grasse, and Cannes to the United States last year amounted to about \$40,000. There are six or seven manufactories at Nice, the same number at Cannes, and at Grasse about sixty. There is a distinction between the manufacturer and the perfumer. The business of the former is to extract from the flowers their essential oils. The perfumer buys these oils, pomades and extracts, and compounds them in various ways.

A warm, dry climate, sunbiny during the period that the flowers are in bloom is best for the manufacture of perfumery. The climate and long winters of our northern and middle States forbid the prosecution of this business, but it may become profitable on the States bordering on the Gulf of Mexico and in California. A few years since a French manufacturer had an establishment in Louisiana, but finding it unprofitable returned to France in 1841.

Of all the fragrant flowers in the world only about twelve are used in the manufacture of perfumery, to wit: the violet, rose, orange flower, jasmine, tuberose, cassie, lavender, thyme, rosemary, geraniums, jonquil and fennel—of which the rose and the orange flower are the most valuable. Of the numerous varieties of rose only one is used, the Provence rose, single, pale pink, the most sweet smelling of roses—not hardy, a temperature of 20° Fahrenheit destroying the crop.

Mr. Aldis encloses a paper by Mr. F. Warwick, of Nice, on the cultivation of flowers for perfumery, from which we quote :

"The year commences with—

"VIOLETS, DOUBLE PARMA.—There are usually cultivated beneath the orange trees. The ground ought to be well dug two feet deep with a forked spade. The best time of planting is about the first of April, immediately after the flowering has ended. Subdivide the old plant into five or six small bunches, or if you wish to preserve the original plant in its original place, merely take off the runners. Plant them in rows of nine or ten inches apart. As soon as they are fairly rooted they ought to have a good dressing of liquid manure, which should be repeated in December and January of each year. During the summer they must be irrigated every ten or fifteen days. The plantation should be renewed every five or six years. They begin to bloom in December. Picking for perfumery generally commences in February and ends the middle of April.

"Jonquil is cultivated in a good soil, exposed to the sun; needs no irrigation. The flowers are picked in April.

"Roses require a deep soil, exposed to the sun. The ground ought to be dug three feet deep. The off-shoots are taken with a small particle of root from the old plants and are planted in rows two feet from plant to plant in the row, and each row five feet apart. When planted out, cut them down, only leaving two ends above the ground. If the weather is dry, water them once after planting, otherwise they do not require irrigating. The proper time for planting is from November to February. November is best on high, dry and sloping ground. Once every year in January the ground should be well manured, dug with a

forked instrument, and the superfluous off-shoots taken off to replant. The branches ought then to be bent and fastened or festooned, one plant to another, and dry or stunted branches cut away. The ground ought to be well hoed and cleared of weeds in June. The better they are cared for the better they yield. Nothing should be planted or sown between the rows. After the first year they yield a small crop. A plant from two to four years old will yield from twelve to sixteen ounces of flowers. The picking begins the last of April or first of May and lasts from three to four weeks.

"ORANGE.—The orange is propagated from the seed. After the first year they are planted in rows about two feet apart. In the third year they are grafted, and in the fourth year removed to where they are to remain. Not only the spot where the tree is to stand but the whole ground should be dug four feet deep. This is of great importance. It will not be observed at first, but if not attended to when the tree is in its prime, a blight will appear and the tree will not increase in size. As this tree lasts with care above two hundred years, every attention ought to be paid to its infancy. The trees are planted in rows from twelve to twenty feet apart. Violets grow well beneath their shade, but should not be planted within three or four feet of the trees. The ground should be dug and manured every year—liquid manure—in March or the first of April, and the trees pruned in June every second or third year.

"The sweet orange (called Portugal) is cultivated for fruit; its flowers are of much less value for distillation than those of the sour orange and sell for only about half their price.

"The sour or bitter orange (called bigaradier) yields the best profit, and is less affected by the long, dry heat of summer. The fruit of the sweet orange makes the essential oil of sweet orange, generally called oil of Portugal. It is made in December or January by rubbing the orange in pewter cups, garnished with prickles, which pierce the vesicles of the rind, and cause the oil to flow out. The remainder of the rind is rasped and distilled, yielding an inferior oil. The pulp is mixed with bran and fed to cows, making them yield more milk.

"The bitter orange yields the best blossoms for perfumery. The blossoms are picked in May. The essential oil distilled from the blossoms of the bitter orange is called oil neroli. One ton of blossoms yields two pounds eight ounces of oil neroli. From the leaves and branches which are pruned in June, is distilled the essential oil called "petit grains," which is much used in the manufacture of eau de cologne. The orange water obtained by distillation from the leaves is sometimes sold for and used as the orange water distilled from flowers, but it is very inferior to the orange flower water.

"The fruit of the bitter orange, by the rubbing process, yields a very fine essential oil, bigarade. It is used in many scents, but principally in the manufacture of the famous curacao.

"GERANIUM.—The oak leaf or scented verberna geranium is propagated by cuttings in September, replanted in March or April, in ground well exposed to the sun and that can be freely irrigated. It grows to the height of four feet, is cut by the sickle, and distilled in August and September. One ton yields from twenty-four to thirty ounces of the essential oil.

"JASMINE.—A delicate flower, requiring much attention in the cultivation,

picking and manipulation. It requires a good, damp soil, easily irrigated, and well exposed to the sun. The grafted plants are placed two feet apart, in rows five feet apart. They must be cut down every spring to within a few inches of the ground. They flower abundantly from July to the end of October, and even later, though the flowers have little or no perfume. From the middle of July to the fifteenth of August the flowers are picked daily just about sunset; after August 15th they are usually picked in the morning as soon as the dew is off. The essential oil is so volatile that it cannot be extracted by distillation, the heated water decomposing it so that only a faint tinge of the perfume is left in the water that passes through the refrigerant.

"TUBEROSE.—This beautiful bulb requires a rich moist soil that can be easily irrigated, and that is well exposed to the sun. The bulb, after being freed from suckers, is planted in April, and blooms abundantly fifteen months afterwards. The time of picking is from the middle of July to October. Like the *jasmine*, the oil cannot be extracted by distillation.

"CASSIE.—This pretty flowering shrub is cultivated from seed planted in espaliers. The ground ought to be well prepared to the depth of four or five feet and exposed to the south. It does not require irrigation. The flowers are picked from the first of October to the end of December; but these picked in October have much more perfume and obtain a higher price. The perfume is not very agreeably by itself, but is much used in compounds."

The process of manufacturing is given as follows:

1. From roses, orange flowers and leaves, geraniums, lavender, thyme and rosemary, the genuine essential oils are extracted by distillation.

The roses and orange flowers have to be very carefully picked over, the buds and all leaves, and everything which could discolor the product removed. They are then put into a still with water; the water is heated, and being thus infused with the flowers the steam rises filled with the oil of the flowers, and passes over into a tube which is coiled round and round in another cylinder filled with cold water, and which is called the refrigerant. Passing through the cold water, the steam is condensed and runs off into a glass receiver—the oil rising to the top, the perfumed water being below.

A ton of roses yields only two ounces of the attar. It is of a golden yellow color with a greenish tinge, which becomes more intense with age. If kept at a temperature below 60° it crystallizes; if kept open to air and light it is easily volatilized.

The essential oil is also obtained from the fruit of the orange by rubbing the fruit in cups armed with pricks, as before described.

2. Perfumed oils are made by putting the flowers, after they have been carefully picked over, into the finest of virgin olive oil. Usually about twenty-five pounds of flowers are put into one hundred pounds of olive oil and left to infuse in the oil for one or two days; then the oil is warmed and strained, the flowers pressed to extract the oil from them; and then the same quantity of fresh flowers is again put into the oil, and this operation is repeated from twenty to twenty-five times. In this manner the perfumed oils of violet, jonquil, rose, orange and cassie are made.

3. POMADES.—It has been found that the essential oil of flowers, which gives them their perfume, has a strong affinity to lard or grease. Lard and suet are clarified and prepared in the most careful manner, and mingled in the proportion of two parts of lard to one of suet. The product is as white as snow. This grease, thus clarified and prepared, is gently warmed, and when it liquifies, the flowers, most carefully picked over, are put into it. They remain in the grease, being macerated and stirred up in it, for several hours, till the perfume is supposed to have been extracted. Then the liquid grease is strained off and the flowers pressed to extract the grease they retain. This process is repeated with fresh flowers for twenty or twenty-five days, till the pomade is saturated with the perfume. In this way we have pomade of rose, orange, violet, cassie.

The pomades of jasmine and tuberose are made in a different way, as their essential oils are dissipated and lost by the application of heat, either in distillation or maceration with heated grease. Frames of wood, about twenty inches square, and somewhat like a schoolboy's slate, are made, a pane of glass being in place of the slate. These frames are so perfectly fitted to each other that when they are placed one upon the other the space between the panes of glass is almost hermetically sealed. No air can get in or out. When put one above the other, the spaces between the panes of glass are about half an inch in depth. Upon both sides of these panes of glass the finest clarified lard (pomade) is spread. The flowers of the jasmine, freshly picked, and if possible before they have lost any of their perfume, are sprinkled over the lard, and the frames are then put one upon another. Thus these delicate flowers are imprisoned in a little chamber of lard, and their perfume as it is exhaled is absorbed by the pomade. They remain so in prison for twenty-four hours, when, having lost their perfume, they are carefully taken off and fresh flowers put in their place. This process goes on for fifty days, during which time the pomade has to be occasionally turned so as to expose all its particles to the perfume. At last, when sufficiently saturated with perfume, it is scraped off the glass and clarified. This is jasmine pomade.

* Jasmine perfumed oil is made by still another process. Thickly woven cotton sheets (similar to lamp cotton) are saturated with the finest virgin olive oil, and then placed upon wire netting, held on wooden frames. The flowers are sprinkled on these sheets, thus saturated with oil, and left for twenty-four hours, when they are taken off and fresh flowers put on. This is repeated for about two months, when the oil being sufficiently filled with perfume, the sheets are folded and pressed till the oil is pressed out. In a moderate sized manufactory about two thousand such frames are required. The flowers of the tuberose are treated in the same way as the jasmine.

4. EXTRACTS.—This term is applied to the oils or perfumes when extracted by spirits of wine or alcohol.

Strong as is the affinity between the perfume of flowers and grease, the affinity for alcohol has been found to be still greater. Hence, if pomades are immersed in alcohol, the perfume is attracted to the alcohol and leaves the grease. In this way the pomade is left in the alcohol for five or six weeks, and stirred several times a day; at the end of the time the alcohol becomes sufficiently perfumed, and we have an extract.

Thus are produced the extracts of rose, orange, jasmine, tuberosa, cassie and violet.

5. Orange flower water and rose water are important products of this business; they are distilled from the flowers, and become separated from the oils in the process of distillation. Orange flower water is considerably used as a kind of healthy medicinal beverage; it is mixed with "eau sacree."

LOWER CALIFORNIA.

ITS CHARACTER AND RESOURCES.

Captain C. M. Scammon has made a report to J. Ross Browne upon the character and resources of the west coast of Lower California, which is condensed by the *San Francisco Bulletin*, as follows:

"Capt. Scammon says the whole extent of the west coast is quite barren, and its approaches bold, except at particular points. St. Bartolme and Magdalena Bay are both excellent harbors, and their entrances are free from all hidden dangers. The latter has an extent of navigable lagoons connected with it of over one hundred miles. There are many places where anchorage may be found, and roadsteads where a ship may lie and find some shelter from the prevailing coast winds; also numerous islets that afford some conveniences for shipping. The climate of western Lower California is a pleasant one. The principal sources of wealth have been its whale and seal fishing, guano and salt. The salt fields of Ojo Lebre, near the head of Scammon's Lagoon, are capable of supplying an almost unlimited quantity of excellent salt. Vessels of 400 tons burthen can find good anchorage within five miles of where the salt can be embarked in lighters of 25 to 50 tons capacity. Several cargoes were brought to San Francisco a few years ago, but the low price of the article, and the existence of supplies nearer home, made the trade unprofitable, and we believe it has been abandoned. Several remarkable lagoons exist along the coast, the entrances to which are often dangerous, and have been the cause of numerous disasters to shipping. These lagoons are the resorts of whales, and have been at times the scenes of great activity for whale fishers. When first entered for commercial purposes their waters were alive with whales, porpoises, and fish of many varieties. Turtle and seal basked upon the shores of low islands, and game of many species was so abundant that the shoals left bare by the receding tides would be closely covered with geese, duck, snipe, and other species of sea fowl.

"* * * "Magdalena Bay and its adjacent lagoons were more largely resorted to for years by whalers. The bay itself is capacious, sheltered and safe, but the approaches to the lagoons are difficult if not always dangerous, lying over shoals, impassable except at high tide. At low water, says the report from which we quote, no one would imagine that a vessel of 200 to 300 tons could ever get over into the deep water between the divides. 'But the whaleman, after contending with the stormy elements and drifting ice of the Arctic Ocean, plies his ship towards the tropics to pass the winter months, seeking his source of wealth in a more temperate clime, with all the determination, energy and tact characteristic

of his calling. He now finds the object of pursuit, not in the fathomless blue water, but huddled together in narrow estuaries, the banks on either hand lined with the evergreen mangrove. Frequently the hollow sound of the spouting whale is heard through the trees, and the vapor ascending is seen above them. The vessel is lightened in every possible way, and by dint of running out anchors, heaving, hauling, grounding and listing, the ships cross the divides, and the whaling is pursued as though no unusual difficulties had been overcome, or none were again to be contended with to reach the open sea.' Whalers have ascended this lagoon 40 miles from its mouth, and then have only been three miles from the shore. The country about Magdalena Bay and its lagoons is generally barren and uninviting. Its resources are whales, fish, oysters, clams, muscles and game. The natives who come from the interior to trade bring cattle, leather, raw hides, soap, cheese, figs, oranges, dates, pearls, shells, and in some instances silver manufactures; exchanging them for ready-made clothing, heavy cotton cloths, calicoes, tobacco and cutlery. They will sometimes come 40 or 50 miles to exchange a few *arobes* of fruit for necessary articles of family use. The quantity of oil taken from 1856 to 1861 is estimated at 34,425 barrels, worth about \$516,375. The annual oil receipts from that quarter have fallen off greatly. Quantities of turtle used to be taken in the bay, and some are still brought from there to San Francisco.

There are fifteen islands off the west coast of the peninsula. They are generally high and wooded, and from their garniture of green, have a more inviting look than the mainland. Some of them afford good shelter for vessels. The highest point on St. Guadeloupe, one of the largest of the group, is about 3,400 feet above the sea, and covered with the pine and cedros. Goats abound in the ravines, and fur seal and sea elephants once made the island a favorite resort. Some prisoners of state were once banished here from Mexico, and a party of *miserables*—probably the same—were taken off a few years ago by an American vessel which chanced to see their signal. Elide Island was covered with guano till the exhaustion of the supply subsequent to 1857, about 28,000 tons having been obtained altogether. Chester's Island also yielded guano for a few years. Cedros Island, the largest of all, is well known to Californians from the scientific and mining explorations of which it has been the scene. Its mountain peaks are visible 60 miles at sea. Its aspect is forbidding, its climate exceedingly dry. Much of its vegetation is peculiar, and has furnished many new species to botanists. The "fayfay" tree yields a medicinal gum, which is made into an ointment with the tallow of the native goat. A few deer are found. The island was formerly a great resort for the hunters of the seal, sea elephant and otter. Other islands are the homes of innumerable sea fowls, and have furnished small quantities of guano, but this staple is now pretty much exhausted. The whale and seal fisheries, which have been from the beginning monopolized by Americans, are also nearly exhausted. On the whole, the western coast of Lower California does not offer much inducement to American enterprise. The interior must be more productive to sustain the numerous herds of cattle that range through the hills and valleys from Cape St. Lucas to San Diego."

MARINE INSURANCE IN ENGLAND.

PAST AND PRESENT UNDERWRITERS.

Marine insurance was practised in England before it was in use in the northern part of the continent of Europe; and even Antwerp, then in the meridian of its commercial eminence, derived it from English merchants. In 1560, Guicciardini states that the traders of England and the Netherlands "have fallen into a way of insuring their merchandise at sea by a joint contribution"; and we may perhaps assume with safety that about this period the practice became tolerably general in the commercial world of Europe.

By 1601 the amount of underwriting business done on the London Exchange had become so considerable, that an act of Parliament was in that year passed for the establishment of a Court of Policies to decide disputes arising out of these documents. For reasons on which we need not now dwell, this tribunal failed to attract much business; and although it was subsequently reconstituted on an improved basis in the reign of Charles II., it had even then no better fate, and ultimately expired of sheer inanition. Insurance was originally carried on in England, as in Venice and on the continent generally, by individual underwriters in Lombard street, who afterwards, for their own convenience and that of the insured, assembled at a coffee-house—the first establishment of the kind in England—which was opened in a yard off that street about the middle of the seventeenth century. In 1710 they transferred their place of meeting to another coffee-house opened by a person named Lloyd in Abchurch lane—and it is from this Lloyd that the body of English underwriters have since acquired the sort of corporate name under which they are known all over the world.

In 1720 the two first insurance companies—the London Assurance and the Royal Exchange Assurance—were incorporated. They owed their existence to the necessities of George I.; and the consideration on which they obtained their charters was the promise—eventually only half fulfilled—to pay his Majesty a sum of £600,000. Established in the year of the South Sea mania, the stock of the two companies was soon raised to an extravagant premium; but when the financial bubble burst, it experienced a more than corresponding depression, and from that circumstance and an accumulation of disasters at sea, they were for some time involved in serious difficulties. Eventually, however, these difficulties were surmounted, and for more than a hundred years they succeeded in maintaining their exclusive privileges as the only insurance company sanctioned or permitted by law. It required at least fourteen years' agitation to convince Parliament of the impolicy of continuing this monopoly.

§ In 1810 the New Insurance Company was formed, with a capital of £5,000,000 sterling, and Parliament was appealed to in order remove the restrictions which prevented its entering upon business. After an elaborate and lengthened inquiry into the subject, a committee of the House of Commons reported that the exclusive privileges of the two great companies should be repealed, and that encouragement should be given to other associations for the promotion of sea-insurance. The influence of the monopolists was, however, sufficient to protract the contest for fourteen years, and it was not until 1824 that marine insurance was thrown open, like life and fire insurance, to

joint-stock enterprise and energy. To those unacquainted with English commercial history, the folly of Parliament in so long maintaining the restrictions we have mentioned may cause some surprise. But in fact it is only of a piece with their legislation down to a very recent period. Every branch of trade, industry and mercantile association has had in turn to struggle for life, against the stupidity and the obstinacy of our rulers, who are even yet far from being disabused of the notion that they know better than traders what is good for trade.

From 1824 the number of English marine insurance companies has steadily increased with the augmenting business offered to them by our expanding trade. Liverpool and Glasgow have long possessed underwriters' rooms, and have transacted a large amount of business. Yet the enormous import and export commerce of Lancashire did not lead, till very lately, to the erection of any independent marine insurance companies, either in the great western port or in Manchester. Latterly, two or three offices have been established there, and Bristol has claimed the right of drawing marine insurance business to its busy mercantile city. Yet in all these places the insurance system flourishes rather like an exotic, having its true habitat in the metropolis of the empire. There are in London at the present time upwards of 20 proprietary marine insurance companies, besides several mutual ship insurance associations, which extend their operations in a smaller degree to the protection of freights and outfits. The aggregate members and subscribers to Lloyd's is rather above 1,500 of whom 400 are underwriting members.

ANNUAL COTTON STATEMENT OF NEW ORLEANS, MOBILE, AND CHARLESTON.

Below we give a review of the cotton movement at New Orleans, Mobile and Charleston for the past year ending August 31, 1867.

NEW ORLEANS COTTON MOVEMENT FOR THE YEAR 1866-7.—The *New Orleans Price Current*, of August 31, publishes its yearly review of the cotton trade of that port, from which we have prepared the following. We have given the weekly movement at New Orleans in the successive numbers of the *CHRONICLE*, and insert here, therefore, only the general results.

With the 1st of September, 1866 the market opened at 31@32c. for (Liverpool classification) low middling, and after rapidly advancing until early in October, it touched 39@40c., which was its highest point, it subsequently declined with but few important fluctuations, until in the latter part of April it sunk to its lowest point of 32c. for low middling and 25c. for middling. Towards the close of that month it took a sudden and favorable turn and rose to 26@27c. for low middling, after which it gave way, receding, by the middle of July, to 22½@23½c. since which it has ranged from 24@26.

The receipts for the year reach 780,490 bales, as follows :

Receipts.		Receipts.		Receipts.	
In September.....	12,186	" February.....	111,734	" July.....	9,336
" October.....	71,462	" March.....	73,910	" August.....	8,041
" November.....	114,069	" April.....	96,855	Add diff. in stock.....	13,323
" December.....	145, 53	" May.....	57,865		
" January.....	187,923	" June.....	15,908	Total for year.....	780,490

Below we give a table showing the States from which the receipts of cotton at New Orleans have been shipped during the past six years:

	1886-87.	1885-86.	1884-85.	1883-84.	1882-83.	1881-82.
I. a. & Mis., bales	588,738	630,877	211,086	124,088	18,815	34,888
Lake	1,070	264	4,828	1,001	1,350	.....
N. Ala. & Tenn	58,018	49,031	.....	.....	.....	2,588
Arkansas	54,830	11,987	239	.....	.....	703
Montgomery	10,792	4,378	868	.....	.....	.....
Mobile	26,678	26,483	16,778	647	606	.....
Florida	11,810	12,788	580	.....	8	.....
Texas	19,061	32,111	7,604	5,214	690	.....
Total for year	780,490	787,886	271,015	121,044	22,078	36,289

The following shows the total receipts and value for each of the last ten years:

Season.	Receipts at N. Orleans.	At Av. price p. bale.	Total value.	Season.	Receipts at N. Orleans.	At Av. price p. bale.	Total value.
1885-86	1,759,298	40 50	\$70,871,730	1882-83	22,078	23 23	\$510,038
1886-87	1,513,247	57 00	86,255,079	1883-84	181,044	26 20	46,877,973
1887-88	1,673,616	53 00	88,127,840	1884-85	271,015	27 54	73,890,286
1888-89	1,774,298	53 00	92,081,794	1885-86	787,886	178 20	140,212,185
1889-90	1,265,448	48 50	2,389,228	1886-87	780,490	126 10	97,922,229
1890-91	1,849,512	50 00	192,465,600				
1891-92	88,890	65 00	1,769,040	T'11 12 yrs.	12,040,997	.....	\$285,028,880

The exports during the year reach 867,816 bales, and the direction of these exports have been as follows. We add the figures of previous years for comparison:

EXPORTED TO.	1886-87.	1885-86.	1884-85.	1883-84.	1882-83.	1881-82.
Liverpool	403,531	268,878	21,226	1,155	2,070	1,223
Havre	159,298	103,744	5,963	4,083	1,649	68
Bordeaux	1,554	766	.....	.....	.....	.....
Bremen	6,785	2,721	.....	.....	.....	.....
Antwerp, &c.	50	.....	.....	.....	.....	.....
Spain, Gibraltar, &c.	24,808	16,454	167	.....	273	21,901
Mexico, &c.	4,885	683	.....	145	.....	.....
Genoa, Trieste, &c.	3,212	286	.....	169	.....	.....
St. Petersburg, &c.	15,482	1,701	402	.....	.....	.....
New York	145,046	154,697	144,190	109,149	17,859	4,116
Boston	81,264	81,457	15,993	12,793	1,418	100
Providence, R. I.	9,711	9,083	2,786	.....	40	.....
Philadelphia	8,349	5,005	1,365	703	143	8
Baltimore	1,106	284	.....	.....	.....	.....
Other coastwise ports .....	.....	1,879	231	.....	.....	.....
Total	867,816	768,543	192,351	123,120	22,760	27,678

RECAPITULATION.

Great Britain	403,531	268,878	21,226	1,155	2,070	1,223
France	160,882	124,510	5,963	4,083	1,649	68
North of Europe	22,217	5,422	402	.....	.....	.....
N. Europe, Mexico &c.	82,350	17,378	167	207	272	21,531
Coastwise	248,376	262,355	164,504	123,645	19,466	4,288
Total	867,816	768,543	192,351	123,120	22,760	27,678

The total amount for the year has been as follows:

Stock on hand September 1st, 1886	bales.	108,828
Arrived during the year	787,167	
Additional bales made from pickings, samples, &c.	13,523	
Total receipts for 12 months	790,490	
Total supply	893,578	
Exported during the year	867,816	
Stock on hand September 1, 1887	125,886	

MOBILE COTTON REVIEW FOR THE YEAR.—The receipts at Mobile for the year ending

August 31, 1867, reach 239,516 bales. Below we give the general movement for the twelve months:

Stock on hand Sept. 1, 1866.....	bales.	29,009
Receipts for the twelve months.....	239,516—	239,516
Total supply for the year.....		268,525
Exported to Great Britain.....	145,566	
France.....	4,853	
Other foreign ports.....	3,506	
U. S. ports, including 10,768 bales from Montgomery to New Orleans direct.....	106,950	
Burned on ship Mobile.....	2,487—	264,811
Stock on hand Sept. 1, 1867.....	bales.	3,714

The exports for the last five years are given in detail in the *Mobile Planter's and Exchange Price Current*, as follows:

EXPORTS OF COTTON FOR FIVE YEARS COMMENCING 1ST SEPTEMBER

Ports.	1866-7.	1865-6.	1860-1.	1859-60.	1858-9.
Liverpool.....	145,141	233,016	339,845	425,908	351,384
Glasgow, &c.....			1,000	1,105	
Cork, Cowee, &c.....	425	1,155		5,650	
Total to G. Britain.....	145,566	233,171	340,845	445,663	351,384
Havre	4,853	40,184	96,429	143,918	105,770
Total to France.....	4,853	40,184	96,429	143,918	105,770
Amsterdam and Rotterdam.....			2,069	1,481	1,801
Antwerp.....				3,980	5,903
Bremen, St. Petersburg, &c.....	530	270	3,064	11,510	24,913
Stockholm, Ghent, &c.....				4,685	4,663
Barcelona, &c.....	2,073	1,363	12,405	24,359	7,500
Genoa, Trieste, &c.....	801		141	14,313	8,334
Other ports.....		41		4,423	2,960
Total to other for. ports.....	3,506	1,579	19,147	64,900	57,781
New York.....	23,803	33,646	7,368	17,581	10,159
Boston.....	25,795	28,235	37,709	44,116	51,994
Providence.....	6,231	3,576	13,543	27,894	33,264
Philadelphia.....	1,493	417	5,564	6,753	4,154
Baltimore.....	226	388	649	4,388	8,331
New Orleans.....	26,765	26,507	43,288	63,685	73,372
Other ports.....	3,800		2,897	525	2,903
Total to U. S. ports.....	93,158	142,764	116,036	158,333	179,354
Grand total.....	261,523	413,098	572,457	817,513	631,249

RECAPITULATION.

Great Britain.....	145,566	233,171	340,845	445,653	351,382
France.....	4,853	40,184	96,429	143,918	105,770
Other foreign ports.....	3,506	1,579	19,147	64,900	57,781
Total foreign.....	153,424	270,934	456,421	659,471	514,935
Total United States.....	93,158	142,764	116,036	158,333	179,354
Grand total.....	261,582	413,698	572,457	817,813	694,789

The value of the exports the last year is \$22,263,749, and the number of pounds 77,227,864, making the average weight per bale 503.36 lbs., and the value \$145 12.

CHARLESTON COTTON REVIEW FOR THE YEAR.—The receipts of cotton at Charleston during the past year reach 166,297 bales. Below we give the amount during the twelve months:—

	S. I. bales.	Upland. bales.
Stock on hand September 1, 1866.....	285	5,200
Receipts during twelve months.....	16,712	149,566
Total supply for the year.....	16,947	154,822
Exported during the year.....	16,753	153,331
Stock on hand September 1, 1867.....	194	1,084

From the yearly review of the *Charleston Courier* we take the following statement of the exports of cotton from that port for two years:—

EXPORTS OF COTTON FROM THE PORT OF CHARLESTON.

	From Sept. 1, 1866, to Aug. 31, 1867.	From Sept. 1, 1867, to Aug. 31, 1868.
	Upland.	S. I. Upland.
Liverpool.....	7,595	57,927
Other British Ports.....	.....	25
Total Great Britain.....	7,595	57,952
Havre.....	392	3,112
Other Foreign Ports.....	.....	20
Total France.....	392	3,132
South of Europe.....	.....	1,625
Total Foreign Ports.....	7,987	72,909
Boston.....	49	5,993
New York.....	8,214	61,735
Philadelphia.....	22	2,959
Baltimore and Norfolk.....	125	2,131
Other United States Ports.....	224	132
Total Coastwise.....	8,766	80,949
Grand total.....	16,753	153,851
		5,728
		102,902

BRANCH MINT AT SAN FRANCISCO.

The San Francisco papers give the following official statement of the deposits and coinage at the United States branch mint in that city for the fiscal year ending June 30:

GOLD			SILVER COINAGE.		
Denomination.	No. of pt's.	Value.	Denomination.	No. of pt's.	Value.
Double eagles.....	901,000	\$18,020,000	Half dollars.....	1,216,000	\$608,000
Eagles.....	2,000	20,000	Quarter dollars.....	52,000	12,500
Half eagles.....	24,000	120,000	Dimes.....	120,000	12,000
Quarter eagles.....	25,000	62,500	Fine bars.....	122	122,000
Total.....	953,000	\$18,225,000	Total.....	1,908,122	\$752,500

The total value of the gold and silver deposits is \$19,005,049. Below we give the localities from which the above bullion was received:

	Gold.	Silver.		Gold.	Silver.
Arizona.....	\$22,427	\$3,212	Parted f'm g'd.....	.....	112,722
California.....	8,179,772	.....	Total.....	\$12,220,909	\$722,672
Idaho.....	2,080,900	93,666	Bars.....	5,715,220	10,700
Montana.....	576,396	.....	Foreign coin.....	102,792	25,000
Nevada.....	48,677	517,669	Foreign bullion.....	91,642	41,000
Oregon.....	975,974	182	Totals.....	\$12,190,603	\$312,622
Parted in m all.....	895,731	.....		

These returns compare as follows with the fiscal year ending June 30, 1866:

GOLD.			SILVER.		
	1867.	1866.		1867.	1866.
U. S. bullion.....	\$12,220,909	\$17,426,499	U. S. bullion.....	\$722,672	\$222,622
Fine bars.....	5,715,220	.....	Bars.....	10,700	.....
Foreign coin.....	102,792	25,000	Foreign coin.....	26,042	25,000
Foreign bullion.....	91,642	167,907	Foreign bullion.....	49,004	41,000
Totals.....	\$18,190,603	\$17,623,393	Totals.....	\$819,418	\$270,622

CULTURE OF OYSTERS.*

The writer will give an account of the cultivation of this favorite mollusk as practiced in France, and notably at the imperial, or model *parcs* in the *bassin d'Arcachon*.

This bay was evidently intended by nature for an oyster farm, and its rich, firm, muddy bottom has always yielded them in vast quantities until about 1840, when, to the regret and astonishment of the fishermen (who had mercilessly dredged them up at all seasons, and had killed the goose that had laid the golden eggs), their mine was found exhausted; fine, full-flavored oysters that had been heretofore bought for three or four sous the hundred, now readily sold for three francs and upwards, and even with these prices the oystermen were starving.

In 1859 Professor Coste, by order of the emperor, passed the summer at Arcachon, and studied the then unknown subject of oyster cultivation, located the now flourishing and successful *parcs*, and addressed a report to the emperor urging the immediate replanting of these exhausted beds. The following year his suggestions and plans were carried out under the immediate supervision of this naturalist, with surprising and satisfactory results. Here are nearly two thousand acres of excellent bottom for growing oysters, uncovered by the tide for an average of two hours at each low-water, and with the mild winter climate of the southern coast of France, this circumstance is of priceless value, as it enables the laborers to work among, and even handle the oysters at will, and render the term "oyster farm" specially applicable to this locality.

A *parc* is regularly laid out like a market garden, into squares of say two hundred feet, a path goes all around and through them, a post is fixed on the corner with the number of the lot painted on it, and a record is kept by the superintendent of what size, quantity and quality of oysters are planted on each, and his books and stock are inspected at stated intervals. Common curved tiles of baked clay, costing less than a sou a piece, have—after experiments with various contrivances—proved to be the most practical method of catching the drifting "spat." These tiles, or *tuiles* as they are called, were used at first just as they came out of the kiln; but it was found that so large a proportion of the "spat" followed with its young shell the inequalities of the surface, grew so firmly to it, and were destroyed in separating them from the tile, that another ingenious plan was adopted. The tiles are dipped into a kind of cement containing sand and hydraulic lime, which, drying in a few minutes, coats them with an evenly rough surface in every way attractive to the "spat." When it was desirable to remove the oysters, a chisel, fashioned to form the curve of the tile, is easily introduced between it and the oyster, which drops off uninjured.

About the middle of May these tiles are arranged in piles, ten feet long, five feet high, and five feet wide, which structures are called *ruches* or *les rushes* *tuiles*. These tiles are piled in various ways; usually they are placed with the concave roof uppermost, each layer running transversely across the layers beneath it. The sides of the tiles do not touch, but are separated by about three inches

* Artificial Oyster Cultivation in France, by F. W. Fellowship.—From *American Naturalist*.

of space, and often, though not always, adult oysters are laid along in these spaces. When the *ruche* is otherwise completed, heavy stones are placed upon the top to make the mass more solid and safe to resist the action of the stormy waves. Oysters are strewn all around these *ruches*, which are regularly separated from each other by a space of fifteen feet. Between the *ruches* bundles of faggots or *fascines*, bound together in the middle with galvanized wire, are suspended about one foot from the bottom, by a cross piece made fast on two low posts. When the drifting "spat" is ready to adhere to a suitable object, a very large proportion of it is caught, or seeks refuge in one or the other of these friendly asylums, and safely grows to the usual merchantable size.

By the middle of August the oysters have finished their reproductive labor, and begin to fatten again, having become very poor during the Summer, but the tiles and faggots are not taken up until a month later. By that time all the "spat" has located itself, and the *ruches* are carefully taken apart, each tile being laid down in the same position as in the *ruche*, side by side in long furrows or ditches prepared for them.

There they are allowed to remain until the following Summer, when the oysters on the upper side of the tiles are removed and planted in beds, hollowed out about three inches deep, running the length of the *parc*; while the tile is then turned over with the roof-side downwards, and the oysters on the other side are left to grow as they at first fixed themselves, unless, being too much crowded, they grow upon each other, and irregular shapes; in this case they are thinned out. The writer saw many thousands of tiles in rows, with oysters three years old, and of handsome size, still growing where they first were "set;" but usually they are all removed to the beds the second year, and the tiles, after being re-dipped in the cement, are again piled as before.

The faggots are taken to some enclosures, which are called *claires*, which are made of solid mason-work, water-tight, where the water can be admitted and excluded at pleasure, and where the waves can have no power, and are there unbound and left to themselves to grow until large enough to be separated from the branches, which is usually six to eight months, when they are treated like those grown upon tiles.

At the end of the third year the oysters have attained the most desirable size, and are ready for the market. Those grown in the Imperial *parcs* are not sold, but are consumed by the Emperor, presented by him to crowned heads and friends, either for use or to stock their private *parcs*, or abandoned to the poor fishermen, who on certain days are allowed to gather them.

The princess Batichiochi, a near relation of the emperor, has a large farm in the bay of Quiberon, and sells oysters to supply the Paris restaurants and others, in large quantities; and, though her farm was only in its third year, it was, as the superintendent remarked with pride and pleasure, more than paying expenses; but next year! "*Mais l'année prochaine nous ferons des belles affaires aller!*"

The sale of the yearling seed is made a special business by some oystermen, and they bring from four to six francs the thousand. They are put up in round baskets with a small hole in the top, and are kept, at the season of sale, suspended from scaffoldings erected over the water for the purpose, so that the baskets are never above the surface.

The French oyster-growers are very particular that the oysters taken up for market shall lie for five or six days in the *claires* before forwarding them to consumers; this is done in order that all mud and impurities shall be washed out in the pure sea water, and the oyster is certainly whiter and handsomer for this clean bath.

The Marennes, or green oyster, is colored by being placed in *claires* when the tidal water is let out at certain intervals; a conservoid growth is induced which gives the highly prized color and flavor, and doubles the value of the oyster.

The Ostend oysters are placed in wooden vats, and are frequently tossed and tumbled about by women with rakes, thus breaking off the thin edge of the new growth of shell and forcing it to grow more round and deep. Labor in this country is much too high to make a remunerative cultivation of the oyster in this manner practicable.

THE MOUNT CENIS TUNNEL.

The French Imperial and the Italian Royal Commissioners had an official inspection of the works of the tunnel through the Mount Cenis on the 24th and 25th of July. Of the total length of the 12,220 metres, equal to seven English miles and a half and 235 yards, there were excavated on the 31st of December last 3,900 metres on the Italian or Bardeneche side of the mountain, and 2,435 metres on the Modane or French side; total, 6,335 metres. Between the 1st of January and the 30th of June of the present year, 774 metres were excavated, being the largest number by nearly 200 metres excavated in any one-half year since the commencement of the works in 1857. Of the 744 metres, 415 are on the Italian, and 318 on the French side, making the total excavated at that date 7,109 metres. Ever since the commencement, the progress made on the French side has been slower than on the Italian—thus, while on the 30th of June last the latter had only to execute 1,754 metres, or about an English mile and a tenth, to accomplish its half, on the French side there remained to be excavated 3,357 metres, or nearly two miles and a tenth. If three metres a day could be excavated on the French side, the perforation of the tunnel would be accomplished in three years and three weeks; but, as in all probability it will not be proceeded with more rapidly than two metres a day, it will require four years and 31 weeks to complete it. The tunnel will be lined in its entire length with stone quarried in the immediate vicinity of the two entrances. At the present time the excavations, or headings, are about 1,500 metres in advance of the amount lined. Each metre excavated and lined hitherto has cost, on an average, 11,000 francs, and various circumstances will tend to increase this expenditure as the works proceed further inward. The approach on the French side, to connect its entrance at Modane with St. Michel (the present termination of the railway system of France in the direction of the Mont Cenis); will be twelve miles long, through an extremely difficult and mountainous country. On the Italian side the amount of railway to be constructed from Bardeneche to connect it, in the neighborhood of Susa, with the railway system of Italy, will be 22½ miles. The whole of these works will be of a very heavy and expensive character. They

now about to be let, and the time to be allowed by the contract for their completion is to be four years and a half. The length of the railway, *vis* the tunnel from St. Michel to Susa, will be 42 miles, or $6\frac{1}{2}$ miles shorter than that now nearly finished on the outside of the Mont Cenis Pass, and known as the "Fell Railway," from its being constructed in accordance with the patents of the gentleman of that name. The only delay to the opening of this railway for traffic is the non-delivery of its rolling stock, but this difficulty will, it is expected, be overcome by the middle of September. As regards transit through the tunnel, in consequence of the average gradient on the French half being one in $45\frac{1}{2}$, and the steepest gradient on the line being one in 28, it will not be possible for a train to go through from the North to the South in less than from 38 to 40 minutes. Coming from the South to the North the ascent is much more gradual, but even in this case the transit will occupy from 30 to 32 minutes as a minimum. It has yet to be seen whether passengers would not prefer the outside line instead of being shut up in a tunnel so long as we have just stated. It is for this, among other reasons, that many persons expect the Fell Railway, which only possesses a concession for working until the tunnel line is opened for traffic, will have its privileges extended so as to make it practically a permanent concession.—*London Times*, Aug. 8.

MINERAL PHOSPHATE OF LIME.

The use of apatite, or mineral phosphate of lime, as a fertilizer, is at present attracting considerable attention in Europe, and from recent experiments made, in comparison with other fertilizing substances, this mineral promises to take high rank among fertilizers. The native phosphate of lime, or apatite, is a hard and often well-crystallized mineral, chiefly composed of phosphoric acid and lime, and, as stated by Professor Johnson, is found in Devonshire and Cornwall, England, and also in Scotland, but as yet not in sufficient quantity to allow of its being collected for economical purposes. On the continent it is found in several places, as in the Tyrol, Bohemia, Bavaria, Sweden, and Norway. Most commonly it occurs in thin seams, imbedded in crystalline or volcanic rocks, but seldom in sufficient quantity to repay the cost of working. In America it is found imbedded in granite at Baltimore, in gneiss at Germantown, and in granite in Connecticut, New Hampshire, and Maine, and also in Canada and various other localities. Mineralogists distinguish several varieties of apatite, but generally speaking it has a light green or a reddish color. The beds found in Canada are said to be extensive, and the mineral is equal if not superior to that found in Europe. An analysis of the Canada apatite gives the following result:

Phosphate of lime.....	91.80	Insoluble.....	0.90
Fluoride of calcium.....	7.60		
Chloride of calcium.....	0.78		100.48

This mineral is found in extensive beds and deep veins on the border of the Rideau river, and accessible to river craft. It will, doubtless, be found in many places in the United States also, where its presence has not yet been discovered.

Guano is limited in supply, and moreover the opinion is gaining ground in Europe that it is exhaustive to the soil, whereas apatite is enriching and sustaining. A number of experiments have recently been made with this fertilizer in England, with most satisfactory results. One of these trials was made by Sir Harry Verney. The soil on which he applied the phosphate was a heavy sandy loam, resting on a clayey subsoil. The ground was sown with chevalier barley with the following result:

	Manure per acre—		Produce.	
	Tons.	Cwts.	Tcs.	Bush.
Soil simple.....	.....	.....	.....	33½
Burnt bones.....	0	18	0	43½
Unburnt bones.....	1	7	0	40
Pigeons' dung.....	0	18	0	61
Spanish phosphorite and sulphuric acid.....	0	18	0	51½
Spanish phosphate alone.....	0	18	0	43½
Superphosphate of lime.....	1	5	3	48½
Stable-yard dung.....	20	0	0	66

Another experiment upon the growth of turnips, was made by Dr. Daubeny, of England, with the following result:

	Roots, lbs.	Tops, lbs.
Soil simple produced per acre.....	14,308	30,591
Manured with 10 cwt. bone shavings.....	19,329	35,310
Spanish phosphate alone, 12 cwt.....	28,689	42,016
Spanish phosphate 12 cwt. mixed sulphuric acid.....	30,960	34,476
South American guano, 260 pounds.....	31,114	47,060
Bones with sulphuric acid, 11 cwt.....	31,998	17,600
Bones finely powdered, 12 cwt.....	36,185	45,446
Stable dung, 22 tons.....	39,476	49,931

These trials entirely accord with the experience of others on the native phosphate of lime, and show that, while in every instance a considerable increase of crop was obtained by the addition of certain fertilizers, the Spanish phosphate, especially when its action was quickened by the addition of sulphuric acid, proved nearly as efficacious as bones themselves, unless, indeed, when the latter was very finely powdered.

SPANISH RAILROADS.

According to a statement of the Spanish Minister of Agriculture and Commerce, the amount of capital realized and subventions received by the different railroads and canal companies in Spain up to December 31, 1865, was as follows:

	Railroads.	Canals.	Total.
Nominal capital assigned by statutes.....	\$29,519,811	\$2,530,000	\$45,039,811
Capital represented by shares issued.....	27,936,074	1,800,000	
Subvention assigned by laws of conces's.....	17,363,646	300,000	
Capital in hand from shares.....	24,397,510	1,444,738	25,842,248
Subventions received.....	11,438,819	300,000	11,648,819
Nominal value of shares issued.....	61,642,597	530,000	62,312,597
Nominal value of shares taken up.....	54,777,354	530,000	55,297,354
Net value received.....	27,791,977	468,670	28,237,647
Total amount of shares and subventions.....	69,750,833	2,110,402	61,861,235
Net produce of traffic for 1865.....	2,227,450	476,606	
Estimated amount necessary for the completion of all lines.....	31,764,217	118,606	

At the end of 1865 the number of kilometres in work was, as regards railroads, 4,712 (2,928 miles), the number in course of construction was 806 (501 miles), and the number projected was 1,035 (643 miles)—total 6,553 kilometres or 4,072 miles. Of canals in work, the total length was 665 kilometres, or 403 miles.

CITY AND COUNTY DEBTS OF NEW YORK STATE.

The following figures, taken from the *New York Convention Manual*, exhibit the war and other debts of each county in this State, as nearly as can be ascertained. The total amount, it will be seen, is upwards of \$89,000,000, of which the city and county of New York owes nearly \$34,000,000:

Counties.	For railroad subscription and aid.	For roads & bridges.	Miscellaneous, For town & village debts.	For counties, city, town & village war ex-penses.	Total amount of debts.
Albany.....	\$800,000 00	\$30,750 73	\$1,980,350 00	\$1,744,250 00	\$4,545,350 73
Allegany.....	.....	1,515 00	17,433 00	74,543 50	93,491 50
Broome.....	180,000 00	7,900 00	47,037 00	208,037 83	432,974 83
Cattaraugus.....	18,000 00	650 00	19 30 00	10,544 73	29,234 03
Cayuga.....	193,350 00	3,333 33	103,333 33	647,959 19	947,976 05
Chautauque.....	170,000 00	837 30	4,036 28	5,900 00	180,673 58
Chemung.....	.....	250 00	303,34 73	341,394 19	644,988 92
Chenango.....	911,343 74	.....	.....	453,547 17	1,364,890 91
Clinton.....	.....	1,013 39	3,800 00	191,590 15	195,403 54
Columbia.....	155,000 00	600 00	83,400 00	300,763 95	539,763 95
Cortland.....	53,000 00	3,750 00	53,000 00	679,940 00	889,690 00
Delaware.....	602,890 00	.....	150 00	110,433 45	713,473 45
Dutchess.....	.....	85 00	443,037 70	547,400 00	990,522 70
Erie.....	150,000 00	2,196 00	343,000 00	513,255 91	1,008,451 91
Essex.....	.....	1,390 94	.....	193,099 48	194,490 42
Franklin.....	.....	2,175 00	5,000 00	149,353 75	156,528 75
Fulton.....	275,674 00	1,735 00	15,000 00	147,236 00	439,745 00
Genesee.....	.....	.....	10,500 00	432,847 00	443,347 00
Greene.....	10,000 00	1,659 23	400 00	536,300 00	548,359 23
Hamilton.....	.....	3,880 00	730 00	35,731 50	40,341 50
Herkimer.....	10,000 00	7,499 99	700 00	140,333 54	158,533 53
Jefferson.....	150,000 00	16,479 36	30,638 48	1,364,051 48	1,541,269 32
King.....	.....	.....	10,860,419 92	3,717,000 00	14,577,419 92
Lewis.....	130,000 00	699 46	17,030 00	74,131 23	221,960 69
Livingston.....	100,000 00	9,000 00	500 00	154,931 73	264,431 73
Madison.....	327,800 00	1,400 00	15,390 00	6,343 73	411,933 73
Monroe.....	253,000 00	123,015 91	250,533 54	1,650,340 17	2,276,889 52
Montgomery.....	.....	11,345 59	172 60	235,737 30	247,255 49
New York.....	.....	.....	25,899,445 01	8,069,100 00	33,968,545 01
Niagara.....	.....	2,000 00	.....	573,300 00	575,300 00
Oneida.....	215,000 00	6,353 25	753,370 45	3,550 00	1,028,273 70
Onondaga.....	30,000 00	10,150 00	87,999 93	1,223,139 00	1,411,288 93
Ontario.....	.....	1,000 00	1,290 00	498,080 00	500,370 00
Orange.....	180,000 00	7,750 00	1,321 65	903,350 11	1,092,421 76
Orleans.....	.....	2,000 00	.....	239,380 00	241,380 00
Oswego.....	68,000 00	13,234 20	91,555 00	317,511 00	489,799 20
Otsego.....	856,000 00	2,300 00	.....	111,995 35	970,295 35
Putnam.....	.....	.....	13,330 00	93,331 71	106,661 71
Queens.....	.....	.....	40,000 00	1,139,651 00	1,179,651 00
Rensselaer.....	271,000 00	5,775 23	703,353 00	1,089,734 20	2,069,862 43
Richmond.....	12,310 00	.....	65,304 83	301,350 00	378,964 83
Rockland.....	.....	3,000 00	100 00	140,037 03	143,137 03
St. Lawrence.....	.....	25,530 00	111,000 00	750,413 35	886,973 35
Saratoga.....	.....	150 00	335 00	493,739 30	494,224 30
Schenectady.....	30,000 00	.....	37,400 00	123,433 33	190,833 33
Schoharie.....	284,000 00	.....	433 97	93,934 00	378,367 97
Schuyler.....	.....	3,317 00	11,641 71	141,139 04	156,097 75
Seneca.....	.....	750 00	13,737 75	371,135 33	385,623 08
Stauben.....	.....	2,455 00	3,100 00	533,634 06	539,189 06
Suffolk.....	.....	.....	1,735 00	250,090 94	251,825 94
Sullivan.....	108,500 00	.....	6,350 00	242,411 00	356,961 00
Tioga.....	67,600 00	300 00	.....	151,300 00	219,200 00
Tompkins.....	50,000 00	20,773 73	136 00	37,134 35	98,043 88
Ulster.....	1,064,008 15	1,090 00	.....	1,535,373 00	2,600,471 15
Warren.....	.....	250 00	3,553 33	37,373 03	41,176 36
Washington.....	.....	.....	3,500 00	294,335 00	297,835 00
Wayne.....	.....	8,000 00	20,000 00	303,999 00	331,999 00
Westchester.....	.....	114,500 00	34,700 00	1,980,436 55	2,029,636 55
Wyoming.....	.....	1,300 00	.....	3,340 00	5,040 00
Yates.....	.....	3,513 23	3,700 00	33,433 33	40,656 56
Total.....	\$7,793,710 93	\$457,668 33	\$42,530,907 06	\$33,298,749 37	\$83,080,035 69

PUBLIC DEBT OF THE UNITED STATES.

An abstract statement, as appears from the books and Treasurer's returns in the Treasury Department, on the 1st August and 1st September, 1867:

DEBT BEARING COIN INTEREST.

	August 1.	September 1.	Increase.	Decrease.
5 per cent. bonds.....	\$198,481,860 00	\$198,481,860 00	\$.....	\$.....
6 " " 67 & '68.....	14,968,141 80	14,969,791 80	.....	68,360 00
6 " " 1881.....	288,746,400 00	288,778,100 00	.....	70,800 00
6 " " (5-20's).....	1,168,796,800 00	1,806,710,500 00	36,913,700 00	.....
Navy Pen. F'd 6 p.c.....	13,000,000 00	13,000,000 00	.....	.....
Total.....	1,678,996,601 80	1,715,687,741 80	36,781,080 00	.....

DEBT BEARING CURRENCY INTEREST.

6 per ct. (RR) bonds.....	\$15,402,000 00	\$15,946,000 00	\$944,000 00	\$.....
3-yrs com. int. n'tes.....	108,839,430 00	78,839,800 00	.....	29,499,880 00
3-years 7-30 notes.....	451,832,636 00	400,796,086 00	.....	50,447,400 00
Total.....	574,964,636 00	495,971,686 00	.....	78,993,280 00

MATURED DEBT NOT PRESENTED FOR PAYMENT.

Various notes & b'ds.....	15,686,815 87	19,440,875 87	\$3,803,560 00
---------------------------	---------------	---------------	----------------	-------

DEBT BEARING NO INTEREST.

United States notes.....	\$369,164,844 00	\$369,164,844 00	\$.....	\$4,000,000 00
Fractional currency.....	23,554,739 73	23,323,173 97	237,465 26	.....
Gold cert. of deposit.....	19,497,980 00	15,463,700 00	.....	3,996,280 00
Total.....	417,177,538 73	410,019,716 97	.....	7,157,816 75
Aggregate debt.....	2,696,686,966 39	2,641,119,469 64	.....	45,566,496 75
Coin and currency in Treasury.....	175,879,470 88	148,886,094 59	.....	27,043,875 79
Debt, less coin and currency.....	2,511,806,496 01	2,492,233,365 05	.....	18,533,080 96

The following statement shows the amount of coin and currency separately at the dates in the foregoing table:

	August 1.	September 1.	Increase.	Decrease.
Coin.....	\$102,905,174 00	\$101,363,090 00	\$.....	\$1,642,154 00
Currency.....	73,474,896 88	47,073,974 59	.....	26,401,321 79
Total coin & cur're'y.....	176,379,470 88	148,336,994 59	.....	\$27,043,875 79

The annual interest payable on the debt as existing August 1 and September 1, 1867, exclusive of the compound interest notes, compares as follows:

ANNUAL INTEREST ON DEBT.

	August 1.	September 1.	Increase.	Decrease.
Coin—5 per cents.....	\$9,921,697 50	\$9,921,697 50	\$.....	\$.....
6 " " 67-68.....	335,928 51	362,187 51	.....	3,741 00
6 " " 1881.....	17,094,784 00	17,080,566 00	.....	4,218 00
6 " " 5-20's.....	70,197,806 00	73,843,680 00	2,614,633 60	.....
6 " " N. P. F.....	750,000 00	750,000 00	.....	.....
Total coin interest.....	\$98,730,668 01	\$100,866,951 01	\$2,907,653 00	.....
Currency—6 per cents.....	994,180 00	860,760 00	56,640 00	\$.....
7-30 ".....	23,940,040 03	22,867,879 58	.....	3,652,660 30
Total cur're'y interest.....	\$23,864,160 03	\$20,828,189 58	\$.....	\$3,636,080 20
Aggregate coin & currency, excl. comp. interest notes.....	\$122,614,848 03	\$121,166,000 58	\$.....	\$1,419,197 20

The matured debt not presented for payment consisted on the 1st September of the following bonds and notes:

Comp'd int. notes matured June 10, July 15, and Aug. 15, 1867.....	\$12,673,780 00
Bonds of Texas Indemnity.....	263,000 00
Treasury notes, Acts of July 17, 1861, and prior thereto.....	165,312 04
Bonds of April 15, 1813.....	64,768 68
Treasury notes of March 3, 1863.....	959,880 00
Temporary loan.....	5,279,185 55
Certificates of Indebtedness.....	86,080 00

Total amount..... \$19,440,875 87

COMMERCIAL CHRONICLE AND REVIEW.

The Public Debt—Stock Exchange—Prices of Governments—Course of Consols and American Securities at London—Receipts and Shipments of Coin and Bullion—Movement of Coin and Bullion—Course of Gold at New York—Course of Foreign Exchange at New York.

If any persons have doubted whether Mr. McCulloch has had a settled policy in managing the public debt, an examination of the successive monthly schedules registering the movements of that debt, will effectually settle the question. The policy adopted has not, perhaps, in some of its minor details, been the best possible, but that there has been such a policy, and that it has been pretty consistently worked out, Mr. McCulloch has given abundant proofs during his two or three years of office. One of the great necessities which controls this policy is, of course, the consolidation of the debt. Money was borrowed during the war by the issue of many different kinds of securities. These obligations are either to be paid off as they mature, or else they must be consolidated into bonds. It is this process of paying or funding which constitutes the chief popular interest in the monthly debt statements. In that of August, which will be found in this issue of the *Magazine*, it will be seen that nearly 37 millions of Seven-thirties have been funded into Five-twenties, while 13 millions more have been paid off in cash, together with 17 millions of compound interest notes. This is the first point of interest in the statement; a second is the contraction of the greenback currency, to the extent of four millions. This contraction, however, is of small immediate importance in the existing plethora of the money market.

Another important fact which has been much discussed is the rapid depletion of the currency balance, which has fallen to 47 millions, and may perhaps go still lower. So long as the government has to pay eight per cent. for money, it is deemed inexpedient and contrary to sound economy to hold any larger amount of idle currency than is absolutely indispensable in the coffers of the Department. It is evident that those who have most earnestly contended against the policy of holding heavy balances have overlooked the reasons which forced that policy on the Secretary, and forbade him until now to abandon it. So far as the consolidation of the public debt is concerned, we have just reached, and have safely passed, what for two or three years has been looked forward to as the most critical and dangerous period in our National finances. In the fall of 1865, as a consequence of the disbanding of the army and the closing of the war, we had a vast sum due to Treasury creditors which was liable to be demanded at almost any moment. There were the call loans, for which we were paying 5 and 6 per cent. interest, the aggregate being over 106 millions of dollars; the one and two year notes amounted to 38 millions, and the one-year certificates to 85 millions, all of which were rapidly maturing. The embarrassment produced by such short loans was so severe when they were from time to time paid off, that the greatest possible anxiety was felt as to the other short-date indebtedness, and the fact was pointed out that such obligations fell due in the autumn of the present year to a heavy amount. In one month 300 millions of three-year Seven-Thirties matured, and a part of the 217 millions of three-year Compound Interest notes. The aggregate was variously estimated from 350 to 450 millions, all of which under certain contingencies, might be payable in cash. The inevitable result it

was supposed would be, that the Government would be forced to issue an indefinite amount of legal tender notes to extricate itself from its engagements.

Such were the sinister predictions of the croakers in 1865. The Treasury was sure to have the greatest possible difficulty in meeting its maturing engagements, and to be kept in perpetual embarrassment until at length the trouble culminated in further inflation of the currency, with all the loss and derangement to business which such a mischievous expedient would bring on the country. Mr. McCulloch had at that time been for a few months only at the head of the Treasury Department. But he had set in operation the machinery for consolidating the public debt and averting the predicted catastrophe, which, if it had occurred, must have depressed Government securities below par, besides introducing an element of perturbation, incertitude, and distrust into all commercial and financial engagements. To see how this consolidation machinery worked let us pass on to the fall of 1866. During that interval of twelve months the aggregate of the debt had fallen from 2,874 millions to 2,708 millions, the temporary loan was reduced to 45 millions, the debt certificates had disappeared from the schedule altogether, and 50 millions of Compound Notes had been withdrawn, as well as 61 millions of Seven-Thirties. Such was the signal manner in which, the fears of financial trouble were disappointed, and what was most important of all was that the greenback circulation, instead of increasing, was curtailed from \$433,160,509 on the 1st Sept., 1865, to \$391,603,592 on the 1st Sept., 1866.

In the report which has just been issued we see the same policy carried one step further. The temporary loans have been paid off, as have all the short date securities which have matured, with the exception of a small amount of unclaimed clearing house certificates, Compound Notes, and Seven-Thirties, none of which will cause the least anxiety to the Treasury. The greenback currency has been reduced to 365 millions, or about 100 millions less than it was in 1864. The Compound Notes have fallen to 91 millions, none of which will mature till October, when the 3 per cent. reserve certificates will if necessary be available to pay them off. In a word, we have already passed the severest test to which our national debt is likely to subject the financial machinery of the country, and such is the force of that machinery, so great its elasticity and recuperative power, that the whole of this gigantic task has been accomplished without a single jerk or spasm being complained of in the money market. A glance at the debt statement will show, however, that much remains to be done in the consolidation of the debt and in the simplification of its numerous short securities into a few descriptions of bonds at long dates. The debt amount at present to 2,505 millions net, of which 800 millions are unfunded. A year ago the unfunded debt was nearly 1,300 millions, and two years ago 1,650 millions. How soon the whole amount shall be funded is one of the matters respecting which Congress will have to decide, as it involves questions touching the cancelling of greenbacks and the contraction of the currency. It is sufficient for the present to know, that within a year from this time all the floating debt, except such part of the outstanding greenbacks as Congress may decide to leave afloat, will be consolidated in such a form as to cause no such trouble to the Treasury Department as will necessitate the keeping of the large balance of idle currency which for some time past has been more or less necessary.

Business has exhibited during the past month a generally steady movement. The highly satisfactory accounts of the crops in all parts of the country has not produced any appearance of a disposition to "rush" business, or to launch into overtrading. On the contrary, merchants appear to have confined themselves to the strictly conservative terms upon which trade has been conducted for the last five years. This adherence to cash sales and short credits has produced a limitation in purchases, which has been construed as the consequence of a caution inspired by the lack of confidence in prices, but which is very partially due to that cause. In some branches of trade there has been, perhaps an extension of one month in the term of credit to houses of high standing; but as a rule short credits are insisted upon. Western and Southern firms have been steady buyers, and report a healthy demand for goods in their respective sections. The demand for merchandise has so far kept pace with the supply that prices have been generally steady. The downward tendency in cotton goods has been, for the present, arrested, and manufacturers are realising a moderate profit upon their productions. In woolen manufactures there has been no general decline; but it may be questioned whether manufacturers are, on an average, realising the cost of their goods, no reduction in wages corresponding to the fall in goods having yet been effected.

There has been less movement of produce toward the seaboard than was anticipated. The uncertainty as to the result of the European harvests has kept prices of breadstuffs above the figures at which the dealers were disposed to buy, and purchases have consequently been confined to the amount required for the current home consumption.

The course of monetary affairs has been watched with unusual interest; but owing to the postponement of purchases of Western produce the rate of interest has not materially varied. Considerable amounts of Government securities have been sent from the West for realization, and a certain amount of Western produce bills have been discounted by the banks, the result of which was to cause a temporary advance on call loans to 4@5 per cent., a rise of one per cent.; but toward the close, the Government purchased ten millions of Seven thirty bonds, which had the effect of causing a reaction to the former easier rates. The Associated Banks, however, lost during the month about \$13,000,000 of legal tender; and the decided ease of money at the close must be attributed rather to the very limited demand for loans than to the abundance of funds.

The following are the rates of loans and discounts for the month of August:

RATES OF LOANS AND DISCOUNTS.

	Aug. 2.	Aug. 9.	Aug. 16.	Aug. 22.	Aug. 29.
Call loans.....	3 @ 5	3 @ 5	3 @ 5	4 @ 5	4 @ 5
Loans on Bonds and Mortgage...	6 @ 7	6 @ 7	6 @ 7	6 @ 7	6 @ 7
A 1, endorsed bills, 2 mos.....	6 @ 7	6 @ 7	5½ @ 6½	6 @ 7	6 @ 6½
Good endorsed bills, 3 & 4 mos..	6½ @ 8	6½ @ 8	6½ @ 8	7½ @ 8	6½ @ 7½
" " single names.	9 @ 10	9 @ 10	9 @ 10	9 @ 10	9 @ 10
Lower grades.....	11 @ 15	11 @ 15	11 @ 15	11 @ 15	11 @ 15

In stock speculation there has been a marked reaction from the late activity. Outside operators appear to have found employment for their means in business enterprises, and have almost entirely forsaken the market, leaving stocks in the hands of brokers, who carry them easily in the present condition of the money market, but with some uneasiness at the prospect of higher rates of interest.

The increasing earnings of the roads have sustained the price of railroad stocks in spite of the dulness of the market. The total sales of stocks at both boards, during August, foot up 1,082,776 shares, against 2,240,991 in July, and 1,309,282 in August, 1866.

The following comparison shows the prices of stocks at the close of August, 1866 and 1867:

	Aug. 24, 1866.	Aug. 30, 1867.		Aug. 24, 1866.	Aug. 30, 1867.
N. Y. Central.....	104	106½	Cleveland & Pittsburg	87½	94
Erie.....	73½	70½	North Western.....	86½	46½
Hudson River.....	132½	124½	" pref.....	68½	70½
Reading.....	104½	104½	Rock Island.....	109½	108½
Michigan Southern.....	86½	88½	Fort Wayne.....	104½	105½

The following table shows the volume of shares sold at the New York Stock Exchange Board and the open Board of Brokers in the two first quarters and in the months of July and August, and the total since January 1:

VOLUME OF SHARES SOLD AT THE STOCK BOARDS.

	1st Quarter.	2d Quarter.	July.	August.	Since Jan. 1.
Bank shares.....	7,815	11,153	4,784	2,467	26,219
Railroad	5,079,773	4,910,358	1,988,124	931,606	12,909,866
Coal	67,800	25,405	31,563	4,864	129,632
Mining	123,837	91,188	63,110	18,920	297,075
Improv't	81,269	103,435	47,535	9,405	241,694
Telegraph	117,973	153,118	109,630	26,114	406,835
Steamship	223,633	210,973	58,133	33,666	526,399
Expr's &c	17,674	104,430	38,087	33,744	193,933
At New York Stock Ex.....	2,072,406	2,074,351	900,341	461,576	5,568,574
At Open B'd.....	3,632,443	3,540,059	1,340,750	601,300	9,135,059
Total 1867.....	5,704,849	5,615,010	2,240,991	1,062,776	14,663,636
Total 1866.....	6,172,087	5,842,110	1,577,646	1,309,282	14,901,135

The transactions in Government securities have been larger perhaps than during any previous month, the total sales at the stock board being over five millions in excess of the large business of last month. The continued ease in money, not only here but in the European markets, together with an advance in the gold premium, have caused Five-twentieths of 1862 to rise 2½ per cent. since the opening of the month. This upward movement has been further stimulated by a demand from some of the banks, seeking to employ the proceeds of the redemption of their compound notes, and a certain amount of speculative operations. Foreign bankers have also employed a portion of their balances in bonds or Seven-thirties, in preference to lending on call.

The closing prices of Consols and certain American securities (viz. U. S. 6's, 5-20's, 1862, Illinois Central and Erie Railway shares and Atlantic and Great Western consolidated bonds) at London, on each day of the month of August, are shown in the following statement:

COURSE OF CONSOLS AND AMERICAN SECURITIES AT LONDON—AUGUST, 1867.

Date.	Cons for mon.	American U. S. Ill. C. 5-20s sh's.	securities. Erie A. & sh's. G. W.	Date.	Cons for mon.	American U. S. Ill. C. 5-20s sh's.	securities. Erie A. & sh's. G. W.
Thurs.....	1 94	73½	77 43½ 23½	Tues.....	30 94½	73½	77½ 45½ 21½
Friday.....	2 94	73½	77 43½ 23½	Wed.....	21 94½	73½	77½ 45½ 21
Sat'day.....	3 94½	73½	77 43 22½	Thurs.....	22 94½	73½	77½ 44½ 21½
Sunday.....	4 .....	.....	.....	Friday.....	23 94½	73½	77½ 44½ 21½
Monday.....	5 94½	73½	76½ 43½ 23½	Sat'day.....	24 94½	73½	77½ 44½ 21½
Tues.....	6 94½	73½	76½ 44½ 23½	Sunday.....	25 .....	.....	.....
Wedne.....	7 94½	73½	77½ 46½ 23½	Monday.....	26 94½	73½	77½ 46½ 21
Thurs.....	8 94½	73½	77½ 46½ 23½	Tues.....	27 94½	73½	77½ 46½ 21
Friday.....	9 94½	73½	77½ 46½ 23½	Wedne.....	28 94½	73½	77½ 46½ 21½
Sat'day.....	10 94½	73½	77½ 46½ 23½	Thurs.....	29 94½	73	77½ 44½ 21½
Sunday.....	11 .....	.....	.....	Friday.....	30 94½	73½	76½ 45 21½
Monday.....	12 94½	74½	77½ 46½ 23½	Sat'day.....	31 94½	73½	77 45 21½
Tues.....	13 94½	74½	77½ 44½ 23½				
Wedne.....	14 94½	74	78 45½ 21½	Highest.....	94½	74½	78½ 46½ 23½
Thurs.....	15 94½	73½	78 45½ 21½	Lowest.....	94	73½	76½ 43 21
Friday.....	16 94½	73½	78½ 45½ 21½	Range.....	0½	1½	1½ 8½ 1½
Sat'day.....	17 94½	73½	78 45½ 21½	Lo.....	90	67½	73½ 36½ 21
Sunday.....	18 .....	.....	.....	Hi.....	96	75½	83½ 46½ 26
Monday.....	19 94½	74½	77½ 45½ 21½	Range.....	6	7½	10 10½ 5

The lowest and highest quotations for U. S. 6's (5-20 years) of 1862 at Frankfurt in the weeks ending Thursday have been as follows :

	Aug. 6.	Aug. 15.	Aug. 22.	Aug. 29.
Frankfort.....	76½ @ 77½	77½ @ 77½	77 @ 77½	76½ @ 77½

The amount of Government bonds and notes, State and city bonds, and company bonds, sold at the New York Stock Exchange Board in the two first quarters and in July and August, and the total since January 1, is shown in the statement which follows :

	BONDS SOLD AT THE N. Y. STOCK EXCHANGE BOARD.				
	1st quarter.	2d quarter.	July.	August.	Since Jan. 1.
U. S. bonds.....	\$18,708,650	\$40,888,350	\$10,171,900	\$15,772,150	\$85,065,050
U. S. notes.....	4,792,480	3,847,600	4,170,600	4,458,900	18,768,580
St's & city b'ds.....	8,634,100	7,601,850	2,632,000	1,973,500	23,141,500
Company b'ds.....	2,216,900	2,367,700	615,000	733,000	5,936,600
Total 1867.....	\$34,596,480	\$53,705,800	\$18,640,500	\$22,937,550	\$129,572,030
Total 1866.....	32,600,540	36,414,850	14,766,500	16,544,750	100,326,690

The daily closing prices of the principal government securities at the New York Stock Exchange Board are shown in the following statement :

PRICES OF GOVERNMENT SECURITIES AT NEW YORK, AUGUST, 1867.									
Day of month.	6's, 1881.		6's, (5-20 yrs) 1866.		Coupon new, 1867 yrs.		5's, 10-40 yrs.		7-30 yrs.
	Coup.	Reg.	Coup.	Reg.	Coup.	Reg.	Coup.	Reg.	
Thursday 1.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Friday 2.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Saturday 3.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Sunday 4.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Monday 5.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Tuesday 6.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Wednesday 7.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Thursday 8.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Friday 9.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Saturday 10.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Sunday 11.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Monday 12.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Tuesday 13.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Wednesday 14.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Thursday 15.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Friday 16.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Saturday 17.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Sunday 18.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Monday 19.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Tuesday 20.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Wednesday 21.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Thursday 22.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Friday 23.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Saturday 24.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Sunday 25.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Monday 26.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Tuesday 27.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Wednesday 28.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Thursday 29.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Friday 30.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Saturday 31.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
First.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Lowest.....	110½	111½	109½	110½	108½	109½	108½	109½	107½
Highest.....	112½	113½	111½	112½	110½	111½	109½	108½	107½
Range.....	1½	0½	1½	1½	1½	0½	0½	0½	0½
Last.....	111½	110½	114½	109½	111½	108½	106½	108½	107½

The quotations for Three-years' Compound Interest Notes on each Thursday of the month have been as shown in the following statement :

PRICES OF COMPOUND INTEREST NOTES AT NEW YORK, AUGUST, 1867.					
Issue of	August 1.	August 8.	August 15.	August 22.	August 29.
August, 1864.....	119½ @ 119½	119½ @ 119½	119½ @ 119½	119½ @ 119½	119½ @ 119½
October, 1864.....	118½ @ 118½	118½ @ 118½	118½ @ 118½	118½ @ 118½	118½ @ 118½
December, '64.....	117½ @ 117½	117½ @ 117½	117½ @ 117½	117½ @ 117½	117½ @ 117½
May, 1865.....	116½ @ 116½	116½ @ 116½	116½ @ 116½	116½ @ 116½	116½ @ 116½
August, 1865.....	115½ @ 115½	115½ @ 115½	115½ @ 115½	115½ @ 115½	115½ @ 115½
September, '65.....	114½ @ 114½	114½ @ 114½	114½ @ 114½	114½ @ 114½	114½ @ 114½
October, 1865.....	113½ @ 113½	113½ @ 113½	113½ @ 113½	113½ @ 113½	113½ @ 113½

The first series of figures represents the buying and the last the selling price, at first-class brokers' offices.

The following are the closing quotations at the regular board on Friday of each of the last seven weeks.

	July 26.	Aug. 2.	Aug. 9.	Aug. 16.	Aug. 23.	Aug. 30.	Sept. 6.
Cumberland Coal.....	38%	38%	38%	38%	38%	38%	38%
Quicksilver.....	34%	34%	34%	34%	34%	34%	34%
Canton Co.....	53%	51%	49%	51	27%	28%	28
Mariposa pref.....	83%	83%	81	81	81	81	81
New York Central.....	100%	x.d. 105%	104	106%	105	105%	108%
Erie.....	74%	75%	68%	70%	69%	70%	9%
Hudson River.....	119%	120	120	124	124%	124%	128%
Reading.....	107%	106%	104%	104%	104	104	102%
Michigan Southern.....	83	80%	80%	82%	81	8%	83%
Michigan Central.....	113%	110%	110%	110	110	110	111
Cleveland and Pittsburg.....	91%	94%	98%	98%	98	98	98
Cleveland and Toledo.....	124%	123	123%	123	128%	128	126
Northwestern.....	48%	48%	45%	46%	46%	46%	46
preferred.....	73%	70%	69	79%	69%	70%	70%
Rock Island.....	104	101%	101%	103%	103%	103%	104%
Fort Wayne.....	106%	106%	105	105%	105%	105%	106
Illinois Central.....	119	118%	119	119%	119	119	120%

The receipts and shipments of coin and bullion at New York in the two first quarters, and the months of July and August, and the total since Jan. 1, have been as shown in the following statement:

RECEIPTS AND SHIPMENTS OF COIN AND BULLION AT NEW YORK.

	First Quarter.	Second quarter.	July.	August.	Since Jan. 1.
Receipts from California.....	\$4,109,861	\$5,899,535	\$2,662,120	\$3,967,100	\$19,638,655
Import from foreign ports.....	400,077	1,147,619	56,606	540,244	2,153,546
Total receipts.....	\$6,518,938	\$8,047,174	\$2,718,745	\$4,507,344	\$21,792,201
Export to foreign ports.....	6,566,966	18,028,709	13,579,894	1,714,594	39,890,165
Excess of exports.....	\$48,020	\$9,981,535	\$10,861,149	.....	\$18,097,964
Excess of receipts.....	.....	.....	.....	\$2,792,750	.....

The following statement shows the amount of receipts and exports in August and since January 1, for seven years:

	California Receipts—		Foreign Imports—		Foreign Exports—	
	August.	Since Jan. 1.	Aug.	Since Jan. 1.	Aug.	Since Jan. 1.
1867.....	\$2,967,100	\$19,638,655	\$492,000	\$2,105,303	\$3,689,178	\$40,754,729
1868.....	4,437,659	37,603,674	161,819	1,465,097	1,587,861	53,171,740
1869.....	1,678,177	11,711,394	188,072	1,501,335	1,554,898	30,194,143
1870.....	1,241,155	7,775,871	245,868	1,800,984	1,001,014	33,100,464
1871.....	831,113	8,854,053	113,777	1,149,900	2,465,261	39,106,109
1872.....	2,070,193	16,013,723	92,703	823,259	2,712,539	39,757,320
1873.....	4,245,735	33,421,160	1,049,553	32,955,718	2,600	2,364,056

The course of the gold premium has been steadily upward. The export movement has been limited, but the customs demand has been very large, the total requirements for that purpose being close upon thirteen millions. The Cabinet changes and rumors of changes, the apprehension of trouble growing out of the German question, pacific assurances by the cable notwithstanding; and the reported fact that at the close of the fiscal year there was outstanding against the United States a trade balance of about sixty millions in gold—these considerations have each had a tendency to put up the premium. The Treasury has sold coin during the month to nearly the extent of the customs receipts at this port.

The following formula furnishes the details of the gold movement:

GENERAL MOVEMENT OF COIN AND BULLION AT NEW YORK.

	1st quarter.	2d quarter.	July.	August.	Since Jan. 1.
In banks at commen't.....	\$12,185,222	\$3,522,609	\$7,768,996	\$8,788,094	\$13,185,222
Rec's from California.....	6,109,861	6,899,535	2,662,120	3,967,100	19,638,655
Imp's from foreign count's.....	409,077	1,147,619	56,606	540,244	2,153,546
Coin int'et p'd by U.S.....	10,888,308	17,793,025	16,306,871	621,067	45,659,766
Total repo'd sup'y.....	\$20,542,463	\$24,863,909	\$26,794,112	\$13,866,608	\$80,497,945
Exp. to foreign count's.....	\$4,566,966	\$18,028,709	\$13,519,894	\$1,714,594	\$39,890,165
Customs duties.....	\$2,170,628	\$7,185,886	\$9,794,404	\$2,908,740	\$3,054,638
Total withdraws.....	\$29,737,586	\$45,214,595	\$23,314,298	\$14,618,334	\$123,884,813
Excess of rep'd sup'y.....	.....	.....	\$3,478,814	.....	.....
Excess of withdraw's.....	\$9,195,123	\$10,851,785	.....	\$1,751,839	\$43,849,664
In banks at close.....	8,522,609	7,768,996	8,788,094	7,771,595	7,771,595
Def't in reported sup'y, made up from unreported sources.....	\$17,717,783	\$18,630,783	\$5,958,980	\$3,023,494	\$43,880,219

The statement, which follows, shows the daily fluctuations in the price of American gold coin at the Exchange Gold Room during the month of August:

COURSE OF GOLD AT NEW YORK, AUGUST, 1867.

Date.	Open'g	Lowest	High'st	Closing	Date.	Open'g	Lowest	High'st	Closing
Thursday.....	1 139%	139%	140%	140%	Wednesday..	21 141%	140%	141%	141%
Friday.....	2 140	139%	140%	140%	Thursday.....	22 141%	140%	141%	141%
Saturday.....	3 140%	140%	140%	140%	Friday.....	23 140%	140%	140%	140%
Sunday.....	4				Saturday.....	24 141	140%	141%	141%
Monday.....	5 140%	140	140%	140	Sunday.....	25			
Tuesday.....	6 140%	139%	140%	140%	Monday.....	26 140%	140%	141%	141%
Wednesday.....	7 140%	140	140%	140%	Tuesday.....	27 141%	141	141%	141%
Thursday.....	8 140%	140%	140%	140%	Wednesday.....	28 141%	141%	141%	141%
Friday.....	9 140%	140	140%	140%	Thursday.....	29 141%	141%	141%	141%
Saturday.....	10 140%	140	140%	140%	Friday.....	30 141	141	141%	141%
Sunday.....	11				Saturday.....	31 141%	141%	141%	141%
Monday.....	12 140%	140%	141	140%	Aug. 1, 1867.....	139%	139%	141%	141%
Tuesday.....	13 140%	140%	141	140%	" 1866.....	149	146%	153%	153%
Wednesday.....	14 140%	140%	140%	140%	" 1865.....	144%	140%	145%	145%
Thursday.....	15 140%	140%	140%	140%	" 1864.....	255	231%	261%	261%
Friday.....	16 140%	140%	140%	140%	" 1863.....	199%	122%	199%	199%
Saturday.....	17 140%	140%	141	140%	" 1862.....	115%	112%	116%	116%
Sunday.....	18								
Monday.....	19 141	141	141%	141%	8'ce Jan. 1, 1867.....	132%	132%	141%	141%
Tuesday.....	20 141%	141%	141%	141%					

Foreign exchange has ruled steady throughout the month, at a fraction below the specie shipping point. The supply of bills has been strictly moderate, and the demand equally so. Bankers have not drawn much against account.

The following table shows the course of foreign exchange, daily, for the month:

COURSE OF FOREIGN EXCHANGE (80 DAYS)—AT NEW YORK—AUGUST.

Days.	London, cents for 54 pence.	Paris, centimes for dollar.	Amsterdam, forin.	Bremen, cents for rix daler.	Hamburg, M. banco.	Berlin, cents for thaler.
1.....	109% @ 110%	518% @ 519%	41% @ 41%	79 @ 79	86% @ 86%	71% @ 71%
2.....	109% @ 110%	518% @ 518%	41% @ 41%	79 @ 79	86% @ 86%	71% @ 71%
3.....	109% @ 110	518% @ 518%	40% @ 41%	78% @ 79	85% @ 86%	71% @ 71%
4.....						
5.....	109% @ 110	515 @ 518%	41% @ 41%	79 @ 79	86% @ 86%	71% @ 71%
6.....	109% @ 110	518% @ 518%	40% @ 41%	78 @ 78	85% @ 86%	71% @ 71%
7.....	109% @ 109%	518% @ 518%	40% @ 41%	78 @ 78	85% @ 86%	71% @ 71%
8.....	109% @ 109%	518% @ 518%	40% @ 41%	78 @ 78	85% @ 86%	71% @ 71%
9.....	109% @ 109%	518% @ 518%	40% @ 41%	78 @ 78	85% @ 86%	71% @ 71%
10.....	109% @ 109%	518% @ 518%	40% @ 41%	78 @ 78	85% @ 86%	71% @ 71%
11.....						
12.....	109% @ 109%	518% @ 518%	40% @ 41%	78 @ 78	85% @ 86%	71% @ 71%
13.....	109% @ 109%	518% @ 518%	40% @ 41%	78 @ 78	85% @ 86%	71% @ 71%
14.....	109% @ 109%	518% @ 518	40% @ 41%	78 @ 78	85% @ 86%	71% @ 71%
15.....	109% @ 109%	518% @ 518	40% @ 41	78 @ 78	85% @ 86%	71% @ 71%
16.....	109% @ 109%	517% @ 518	40% @ 41%	78 @ 78	86 @ 86	71% @ 71%
17.....	109% @ 109%	517% @ 518	41% @ 41%	78 @ 78	86% @ 86%	71% @ 71%
18.....						
19.....	109% @ 109%	517% @ 518	41% @ 41%	78% @ 78	86% @ 86%	71% @ 71%
20.....	109% @ 109%	517% @ 518	41% @ 41%	78% @ 78	86% @ 86%	71% @ 71%
21.....	110% @ 109%	517% @ 518	41% @ 41%	78% @ 78	86% @ 86%	71% @ 71%
22.....	109% @ 109%	517% @ 518	41% @ 41%	78% @ 78	86% @ 86%	71% @ 71%
23.....	109% @ 109%	517% @ 518	41% @ 41%	78% @ 78	86% @ 86%	71% @ 71%
24.....	109% @ 109%	517% @ 518	41% @ 41%	78% @ 78	86% @ 86%	71% @ 71%
25.....	109% @ 109%	518% @ 518	40% @ 41	78 @ 78	85% @ 86%	71% @ 71%
26.....						
27.....	109% @ 109%	518% @ 518	40% @ 41	78 @ 78	85% @ 86%	71% @ 71%
28.....	109% @ 109%	516% @ 518	41 @ 41%	78 @ 78	86% @ 86%	71% @ 71%
29.....	109% @ 109%	516% @ 518	41 @ 41%	78% @ 78	86% @ 86%	71% @ 71%
30.....	109% @ 109%	516% @ 518	41 @ 41%	78% @ 78	86% @ 86%	71% @ 71%
31.....	109% @ 109%	518% @ 518	40% @ 41	78 @ 78	85% @ 86%	71% @ 71%
Aug.....	109% @ 110%	518% @ 519%	40% @ 41%	78 @ 79	85% @ 86%	71% @ 71%
July.....	109% @ 110%	517% @ 511%	40% @ 41%	78 @ 79	86 @ 86%	71% @ 71%
June.....	109% @ 110%	518% @ 511%	40% @ 41%	78 @ 79	86 @ 86%	71% @ 71%
May.....	109% @ 110%	520 @ 510	40% @ 41%	78 @ 80	86 @ 86%	71% @ 71%
Apr.....	108% @ 10%	522% @ 512%	40% @ 41%	78% @ 79%	85% @ 86%	71% @ 71%
Mar.....	108 @ 109%	525 @ 515	40% @ 41%	78 @ 79	86% @ 86%	71% @ 71%
Feb.....	108% @ 109	523% @ 515	40% @ 41%	78% @ 79	86 @ 86%	71% @ 71%
Jan.....	108% @ 109%	530 @ 518%	41% @ 41%	78% @ 79%	86% @ 86%	71% @ 71%
Since Jan. 1.....	109 @ 110%	525 @ 510	40% @ 41%	78 @ 80	85% @ 86%	71% @ 71%

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

Returns of the New York, Philadelphia and Boston Banks.

Below we give the returns of the Banks of the three cities since Jan. 1 :

NEW YORK CITY BANK RETURNS.						
Date.	Loans.	Specie.	Circulation.	Deposits.	Legal.	
January 5.	\$357,853,460	12,794,892	52,762,779	202,552,554	65,086,121	(63,152,006
January 19.	253,985,458	14,613,477	52,525,103	202,517,096	63,246,870	520,040,029
January 19.	255,082,223	15,865,207	52,854,928	201,500,118	62,225,358	568,822,804
January 26.	261,674,804	16,014,097	52,967,196	207,953,076	63,426,569	512,497,256
February 9.	451,264,555	16,832,951	52,955,847	200,511,596	65,944,541	508,826,583
February 9.	250,268,826	16,157,267	52,777,000	198,241,835	67,622,992	543,574,086
February 16.	253,181,822	14,791,626	52,956,809	196,072,292	64,642,940	455,823,520
February 23.	257,582,994	13,513,456	52,806,141	198,420,847	63,153,895	443,574,086
March 2.	251,156,426	11,579,851	52,954,423	198,018,914	63,014,915	443,574,086
March 9.	253,141,458	10,868,138	52,409,811	200,232,587	64,523,440	544,173,256
March 16.	253,012,972	9,908,722	52,492,685	197,968,504	62,513,039	552,119
March 23.	259,400,315	9,142,918	52,519,401	191,875,615	60,904,938	472,02,818
March 30.	255,152,854	8,521,619	52,669,195	185,480,260	62,459,811	459,850,002
April 6.	254,470,087	8,183,813	52,774,872	182,861,299	59,081,775	885,184
April 13.	250,102,173	8,856,229	52,702,947	182,861,299	60,202,515	535,962,403
April 20.	247,561,781	7,632,585	52,648,571	184,080,256	64,086,916	447,514,875
April 27.	247,737,351	7,404,804	52,601,265	187,674,841	67,920,851	446,484,422
May 4.	250,871,558	9,092,177	52,571,747	195,721,073	70,587,407	509,860,118
May 11.	253,682,829	14,952,590	52,595,859	200,842,829	67,996,629	524,319,709
May 18.	257,951,874	15,567,252	52,637,801	201,426,864	68,583,501	648,678,729
May 25.	256,091,806	14,083,607	52,697,252	198,672,345	60,562,440	411,722,622
June 1.	252,791,514	14,617,070	52,747,089	190,326,143	58,459,837	442,675,585
June 8.	248,640,477	15,099,088	52,710,088	184,780,828	55,922,117	461,734,216
June 15.	246,222,465	12,655,859	52,707,199	180,817,763	57,924,294	460,968,692
June 22.	248,640,477	9,899,535	52,632,171	179,477,170	62,816,192	442,410,804
June 29.	242,547,904	7,708,996	52,542,660	195,213,257	70,174,755	493,944,356
July 6.	254,361,287	10,852,171	52,669,397	191,524,312	71,106,472	494,081,900
July 13.	247,918,009	12,715,404	52,653,866	197,872,063	72,495,708	521,259,463
July 20.	249,580,255	11,197,700	52,574,943	199,426,962	73,441,301	491,480,952
July 27.	251,242,880	8,737,094	52,596,859	200,608,886	74,605,840	481,007,226
August 3.	254,940,016	6,461,949	52,559,117	201,153,754	75,098,762	469,621,546
August 10.	252,427,340	5,811,997	52,565,878	199,406,705	76,047,451	499,898,025
August 17.	253,225,411	5,980,567	52,669,787	194,046,591	89,473,793	412,289,517
August 24.	250,697,679	6,088,555	52,726,249	198,744,101	84,980,020	421,496,637
August 31.	247,577,022	5,717,505	52,715,122	199,892,315	87,923,571	555,591,542

PHILADELPHIA BANK RETURNS.

Date.	Legal Tenders.	Loans.	Specie.	Circulation.	Deposits.	
January 5.	\$20,209,064	52,312,817	903,663	10,888,820	41,508,827	
January 12.	20,006,255	52,525,491	903,320	10,320,577	41,022,421	
January 19.	19,443,099	52,458,807	877,549	10,881,525	30,048,645	
January 26.	19,263,374	52,168,478	890,583	10,894,683	29,001,779	
February 2.	19,269,128	52,357,120	871,564	10,420,958	29,592,712	
February 9.	19,959,250	52,384,229	872,614	10,449,892	29,817,595	
February 16.	18,892,747	52,573,120	867,110	10,522,973	40,050,717	
February 23.	17,887,523	52,294,721	841,222	10,556,434	38,646,013	
March 2.	18,150,657	51,979,173	816,842	10,511,600	29,267,288	
March 9.	17,521,705	51,261,458	822,755	10,572,068	27,514,672	
March 16.	16,955,612	50,516,294	828,022	10,580,911	31,596,001	
March 23.	16,071,780	50,572,490	807,418	10,611,987	24,511,545	
March 30.	15,856,948	50,880,206	602,148	10,631,522		
April 6.	15,882,745	50,998,281	64,719	10,651,615	22,796,695	
April 13.	16,186,407	51,223,776	546,625	10,645,867	24,977,823	
April 20.	16,522,226	51,611,441	453,535	10,647,224	25,820,580	
April 27.	16,787,001	51,890,959	282,817	10,638,021	26,234,570	
May 4.	17,106,558	52,054,267	386,653	10,639,695	27,371,064	
May 11.	17,278,919	52,474,283	408,763	10,627,953	28,172,169	
May 18.	16,770,491	52,626,220	402,978	10,620,881	28,220,522	
May 25.	16,019,180	52,626,170	269,122	10,632,520	27,773,783	
June 1.	16,831,100	52,747,208	224,292	10,627,422	27,322,144	
June 8.	16,580,720	52,152,124	346,615	10,642,920	27,352,614	
June 15.	16,300,010	52,192,049	298,951	10,646,898		
June 22.	15,964,424	52,063,441	273,808	10,642,224	27,222,579	
June 29.	16,105,611	52,522,053	265,187	10,641,311	26,616,547	
July 6.	16,722,675	52,420,272	461,951	10,640,301	27,077,455	
July 13.	16,224,914	52,502,252	419,899	10,641,770	27,222,579	
July 20.	16,602,980	52,150,559	271,744	10,627,651	27,170,418	
July 27.	16,262,112	52,104,475	222,118	10,622,750	27,222,579	
August 3.	16,722,198	52,427,840	309,055	10,625,925	27,222,579	
August 10.	16,909,125	52,117,569	204,792	10,627,761	27,222,579	
August 17.	15,797,146	52,549,449	217,220	10,628,810	27,222,579	
August 24.	16,262,616	52,260,020	214,242	10,623,224	27,222,579	
August 31.	15,717,009	52,726,097	207,656	10,626,256	27,222,579	

BOSTON BANK RETURNS.

(Capital Jan. 1, 1866, \$41,900,000.)

	Loans.	Specie.	Legal Tenders.	Deposits.	Circulation.	State.
January 7.....	\$97,009,742	1,183,461	17,033,827	40,284,618	24,580,267	212,064
January 14.....	93,401,779	1,384,900	16,829,35	40,246,216	24,297,446	211,749
January 21.....	95,893,938	1,078,180	16,594,099	38,679,604	24,275,163	207,911
January 28.....	97,691,339	1,058,899	16,816,481	39,219,241	24,716,597	202,298
February 4.....	97,749,481	956,569	16,394,604	32,703,053	24,691,075	206,014
February 11.....	97,264,162	878,396	1,102,479	39,474,859	24,086,061	205,603
February 18.....	96,949,473	929,940	15,898,333	38,900,510	24,765,490	205,604
February 25.....	95,837,000	779,492	15,741,046	37,893,963	24,953,605	202,236
March 4.....	95,050,737	958,697	15,948,103	38,316,572	24,675,767	201,430
March 11.....	19,078,975	695,447	15,719,479	34,712,053	24,346,631	180,518
March 18.....	93,156,444	568,194	16,270,979	36,751,733	24,809,523	229,133
March 25.....	92,661,040	516,184	16,557,905	34,713,725	24,738,739	229,081
April 1.....	91,723,347	483,113	17,12,493	37,056,888	24,843,376	208,625
April 8.....	91,679,540	458,751	16,860,418	37,258,775	24,851,599	206,011
April 15.....	91,712,414	376,843	16,815,355	37,818,525	24,338,319	227,205
April 22.....	93,473,615	343,712	16,549,598	33,207,548	24,832,200	226,721
April 29.....	93,353,922	320,851	16,928,564	37,637,092	24,811,437	224,623
May 6.....	92,671,149	559,878	16,571,136	38,731,769	24,734,333	223,686
May 13.....	93,423,114	517,597	16,552,421	38,504,761	24,503,993	223,514
May 20.....	92,633,587	507,806	16,499,319	37,874,852	24,538,409	226,671
May 27.....	92,226,677	441,073	16,888,861	37,123,051	24,805,860	220,953
June 3.....	92,694,925	571,526	17,173,901	37,046,594	24,765,704	227,973
June 10.....	93,436,197	496,767	16,767,854	36,032,716	24,804,163	226,736
June 17.....	93,725,423	511,095	17,719,795	36,089,983	24,771,773	227,046
June 24.....	92,951,163	470,544	15,768,396	36,521,129	24,768,947	227,234
July 1.....	93,996,708	617,456	16,055,141	37,475,337	24,727,313	226,232
July 8.....	94,747,778	915,298	16,065,466	38,261,040	24,801,823	226,044
July 15.....	95,046,458	823,466	15,897,848	38,640,431	24,771,668	224,223
July 22.....	95,096,511	650,208	15,427,635	38,323,613	24,744,291	223,686
July 29.....	95,594,214	361,873	15,543,401	38,648,722	24,653,742	224,594
August 5.....	96,397,568	473,045	15,511,064	33,398,460	24,655,075	223,250
August 12.....	97,098,678	412,217	15,190,701	38,763,576	24,670,823	223,673
August 19.....	96,901,697	365,137	14,697,154	36,902,686	24,613,021	223,071
August 26.....	96,945,437	396,576	15,175,438	35,790,634	24,707,736	221,223
September 2.....	97,019,818	400,680	15,296,583	35,810,908	24,734,146	220,577

CONTENTS FOR SEPTEMBER.

NO.	PAGE.	NO.	PAGE.
1. Proposed Financial Policy of N. York	169	15. Southern Railroad Reports.....	219
Canal Enlargement, etc.....	169	16. Manufacture of Perfumery.....	221
2. Railroad Progress in the South.....	174	17. Lower California.....	226
3. Debt and Finances of Louisville.....	177	18. Marine Insurance in England.....	226
4. Commercial Law, No. 35—Life Insurance.....	180	19. Annual Cotton Statement of New Orleans, Mobile, and Charleston.....	229
5. The Chontales Gold Mines.....	181	20. Branch Mint at San Francisco.....	230
6. Emigration at New York and the Emigration Board.....	186	21. Culture of Oysters.....	233
7. Railroad Earnings for July.....	193	22. The Mount Cenis Tunnel.....	235
8. The National Banks.....	194	23. Mineral Phosphate of Lime.....	236
9. Debt and Finances of Buffalo.....	196	24. Spanish Railroads.....	237
10. Life Insurance in the United States.....	198	25. City and County Debt of New York State.....	240
11. Chesapeake and Delaware Canal.....	200	26. Public Debt.....	240
12. Proposed Prohibition of Railroad Expansion.....	201	27. Commercial Chronicle and Review.....	246
13. Public Lands of the United States.....	203	28. Journal of Banking, Currency, and Finance.....	247
14. Chicago and Northwestern Railway.....	217		

The following advertisements appear in our advertising pages this month:

MERCANTILE.
 Little's Fire & Burglar-Proof Safes—193 B'way
 Lewis and Hendrick & Co.—110 Broadway—Anthracite and Bituminous Coal.
 A. B. Sands & Co.—129-141 William St.—Drugs
 Duryea's Malvern—166 Fulton street.
BANKERS & BROKERS.
 Duncan, Sherman & Co.—Cor. Pine & Nassau.
 J. P. Morton & Co.—30 Broad Street.
 Tenth National Bank—326 Broadway.
 Ninth National Bank—363 Broadway.

Lockwood & Co.—24 Broadway.
 Barstow, Eddy & Co.—26 Broad St.
 Gilmore, Dunlap & Co.—Cincinnati.
 DeWitt, Kittle & Co.—33 Wall St.
 Vermilye & Co.—44 Wall St.
 Eugene Kelly & Co.—36 Wall St.
 Simon De Visser—53 Exchange Place.
INSURANCE
 Fidelity Insurance Co.—11 Broadway.
 Marine—Great Western Insurance Co.
 Fire—Hope Fire Ins. Co.—92 Broadway.

THE MERCHANTS' MAGAZINE

AND COMMERCIAL REVIEW.

OCTOBER, 1867.

CAUSES OF FLUCTUATIONS IN THE BANK OF ENGLAND RATE OF INTEREST.

Nothing is more certain than that we cannot make money easy and enforce a low rate of interest by legislative enactment; still one of the important necessities of modern commerce is a moderate equable interest for money borrowed, and if we can secure this to any country we shall confer a benefit which it is not easy to overestimate. Napoleon I., therefore, was not so far wrong when he said that the chief use of a great National Bank, and almost the only excuse for its existence, was that it should lend money at a low steady rate of interest. There is no doubt that in our times, under the existing methods of organizing industry, severe and sudden fluctuations in the price exacted between borrowers and lenders of floating capital, are likely to inflict heavy losses on individuals, to check the growth of national wealth and productive power, as well as to become the fruitful cause of disappointment, bankruptcy and suffering to the industrious and enterprising classes of the community. It is one of the proud characteristics of the Bank of France, that whatever else may be said to its disparagement, its rates of interest have been raised very little and very seldom from the average of four per cent. during the present generation, and it is one of the most grave and damaging charges which has ever been brought against the Bank of England and against the British system of financial machinery, of which the Bank forms a controlling part, that its minimum of interest has fluctuated from 2 to 10 per cent. with a frequent violence which has

baffled all forecast; and that ever since 1844, when the present Bank Charter was passed, such spasmodic anomalies have been much more remarkable than ever before. On this account that charter has been held responsible for all the mischief. The arguments *post hoc ergo propter hoc* is an easy one to urge, and too often a difficult one to refute. The general expectation has been that the British Parliament would appoint a commission for taking such evidence as the panic of 1866 might evolve to throw light on the increase of monetary stringency by the operations of the Bank. It is to be regretted that in the reform agitation which has convulsed England during the past session, these financial questions have been crowded out and forgotten. Meanwhile, valuable facts are fading from sight. The memory of such events soon becomes confused, and the evidence conflicting. Theories dominate facts, and at some future time, when the inevitable inquiry is to be made, we shall come to it in a cooler and more judicial temper, perhaps; but with a less vivid recollection and a less adequate view of the evidence to guide us to right conclusions.

We have said that it is impossible to regulate the rate of interest by act of Parliament. If we were to go further, and affirm that the Bank Charter Act of 1844 is not responsible in any direct manner for the perturbations of the money market which have followed it, we should not concede that an inquiry into the operation of the act would be unnecessary or fruitless. The bank charter is one thing, and the action of the Bank directors under that charter is a very different thing. The former may be good, while the latter may be more or less bad. The fact is that all the legislation of the English Parliament relative to the Bank since the celebrated Currency Act of Mr. Peel in 1819, has avoided intermeddling with the rate of interest, and has been directed to a totally different object—namely, the preservation of the nation from the currency troubles which were so serious during the first two decades of this century.

What that legislation has aimed to accomplish is to keep the currency of England at par with gold, and to prevent its bank notes from ever again depreciating or falling to a discount as compared with coin. The object has been fully secured for nearly half a century, and it has been done by the application of the safeguard for whose virtue and efficiency this journal has always contended in regard to our own currency. The safeguard is founded on the principle that the amount of the currency afloat in any country regulates the value or purchasing power of that currency. It being acknowledged that if more currency is afloat than the business of the country requires on a par basis, the value of the currency will fall below par, the currency-issuing institutions of England are put under stringent restrictions. And the only increase that currency can receive beyond a fixed amount must be issued to represent gold coin or bullion actually in the vaults of the Bank, and ready to be paid out on demand. The great aim of the Parliament then has been to prevent depreciation, or, as it is sometimes expressed, "to secure the convertibility of the note;" and this aim, we repeat, the successive legal enactments have fully accomplished for fifty years during which they have been in force. This point has indeed been urged as an argument against further investigations by parliamentary commissions, in addition to those which have taken place in past years.

Another argument against the appointment of an investigating committee at present, is that similar researches and inquiries of former Parliaments have been so full as to preclude the necessity for anything further of the same sort. But this reasoning is evidently faulty. Former inquiries have not led to a remedy. The evils of a treacherous money market are too appalling for us to conclude that they are incurable. And the only hope of cure lies in inquiry and examination. There are, moreover, various well-known features in the panic of 1866 which differ from all other financial revulsions which have been known in England. These facts, when brought into a fuller light, may perhaps be suggestive and useful as factors for the solution of the problem. For these and other reasons the long agitated Bank investigation will doubtless be made next session. At this distance it is not our intention, nor have we the requisite control over the sources of information, to venture to point out the directions which the future inquiries may take. There are two points only which we will suggest.

The first is the action of the Bank of England under a drain of gold. It is well known that when, from any cause, the gold reserve of the bank falls there is but one remedy applied, namely, to raise the rate of interest. The evil which has caused the drain of gold may be in its nature either financial or political, it may arise from foreign complications, or from internal or domestic causes—but no matter. The remedy which the directors apply is always one and the same. They know of no other method to attract gold into their vaults than by checking the activity of business, and giving in this way a turn to the foreign exchanges. Now, the act of 1844 does not prescribe any such method of replenishing the gold reserve. The Bank of France has on several occasions made up its failing reserve by other methods than this. Such methods are, perhaps, more costly to the bank, but infinitely less costly to the nation. We do not say they are capable of adoption in connection with the gigantic foreign trade of England, but we do say that we expect the report of the Parliamentary Commission will give us more explicit and exhaustive information on this special point than any of the previous blue books that have been issued.

The only remaining question we shall raise connects itself with the Joint Stock banks. Since 1834, when the first of these institutions opened its doors, they have received a prodigious increase of power, and the doubt is whether that power does not need regulation. We have before pointed out that the chief trouble in respect to the sudden variations of the rate of interest dates from 1844. And it is a noteworthy fact that these institutions have grown up during the same period. In 1835 the joint-stock deposits were only £266,000, in 1845 they aggregated £10,053,000, in 1855 they had increased to £29,109,000, in 1861 to £50,783,000, and now they amount to £68,609,548. From these figures it is easy to see that the relations of these institutions to the British money markets have undergone a complete revolution since the bank act of 1844 was enacted. Then their operations were comparatively small. They had only 10 millions to use besides their own capital. Now they have nearly 70 millions of borrowed money which they control, or more than three times as much as the individual deposits of the Bank of England. The joint-stock banks have therefore been justly

pointed out as probable sources of some of the trouble we are investigating. We do not under-value the usefulness of these institutions, or the high reputation some of them deservedly enjoy. But the evidence against them is confirmed by several facts, amongst which are the following: First, their earnings are too large not to suggest doubts. Dividends of twenty-two per cent., or twenty-five per cent., or even twenty-eight per cent. a year are not to be made without more risks than are consistent with safe, legitimate banking, especially as the rate of interest being 2 per cent., 1 per cent. is bid by the banks for deposits. Secondly, to enable themselves to pay such large dividends, the paid up capital is kept very small in proportion to the risks incurred and the business done. The aggregate paid up capital of the 7 banks is only £8,609,804, while the deposits are £88,609,548. Including surplus they have thus 78 millions sterling to use, of which only nine millions is their own money. On these funds they do the following business. They hold of government securities 8 millions, and of private securities 67 millions, and to guarantee their solvency they report 12 millions of cash reserve, of which nearly 3½ millions are in a single bank, which says that this sum includes cash "in bank, at Bank of England," and *at call*.

If, leaving the aggregates, we examine the individual banks, we shall find ample room for the expectation that in case of any flurry in the money market these institutions, by their alarm, and by their efforts to strengthen themselves would be likely to increase the trouble. Take, for example, the London and County Bank, which is regarded as one of the most respectable. Its paid up capital is £880,864, while its deposits are £12,033,334. It has thus some 13½ millions sterling to employ with a view to make dividends on a paid up capital of considerably less than a million. These funds are invested in government securities to the extent of £968,796, while in other securities £10,334,328 is invested, and a cash reserve is kept of £3,284,352.

It will be observed that we do not question the stability and ultimate solvency of these joint-stock banks. To discuss that point is foreign to the object we have in view, and would lead us away from the point we have raised, which is simply the behavior which might be expected from them in time of sudden pressure, and the results of that behavior on the course of the money market. We may recur to the subject hereafter, and will do no more in this place than suggest that institutions having so vast an aggregate of funds continually flowing into and out of their vaults, should be compelled to keep a larger reserve of cash in hand, and should be placed under more obligations of publicity, by being required to publish a weekly statement, like that required of the Bank of England and the Bank of France.

THE SUEZ CANAL.

This great work, "a connecting link between two worlds," appears, according to the last report of the company, just made public, to be progressing satisfactorily. One after another the difficulties which have been denominated insurmountable by the faithless and doubting, have been met and overcome, until now it is thought that only about two years

more will be required before what has so long existed as a grand idea only, may become an accomplished fact. This favorable opinion is at present not only expressed by those pecuniarily interested in the work, but widely known English Engineers, who have hitherto been so skeptical, admit at length its feasibility, and profess confidence in its speedy accomplishment.

It is difficult to estimate the importance of this work to commerce and civilization. Bringing, as it does, Europe into immediate and direct communication with Asia and Africa, it cannot but exercise an incalculable influence in disseminating western civilization among the teeming population of the East, while at the same time it furnishes to the immense trade with those countries, the stimulus of a rapid and economical means of transit. The Mediterranean Sea, as our readers well know, is separated from the gulf of Suez by a narrow isthmus of land only seventy-five miles wide. That gulf gradually widens into the Red Sea and Sea of Arabia and, finally, into the great Indian Ocean, which lies between the Western coast of Africa, India, China and Australasia. The present channel for commerce between Europe and those countries embraces a wide circuit of the navigable globe around the Cape of Good Hope, and occupies from five to seven months. But the direct route even over that extensive course cannot be taken, since ships leaving Europe or the American Atlantic ports for India, China or Australasia must make immense detours by the Canaries or Azores in order to get into or avoid the monsoons or winds that blow steadily in one direction for months, and promote or retard their passage. Hence it is evident that if vessels could cross direct from the Mediterranean to the Gulf of Suez the distance to India would be shortened nearly three-fourths with a corresponding saving in the cost of transportation, while at the same time the dangers attending a voyage round the Cape of Good Hope would be wholly avoided.

Under these circumstances it can be easily understood how the opening of such a channel between the Mediterranean Sea and the Gulf of Suez should have long enlisted earnest attention, and still more earnest efforts for its accomplishment. In the early days of Egyptian civilization a canal was commenced by Pharaoh Necho, and finally completed by Darius, the remains of which still exist. It was destroyed during the fierce wars of Mahommedan conquest, and has since to such an extent been choked up by the shifting sands of the desert, as to be so utterly worthless that the new canal now in progress does not even follow the original route. The restoration of this ancient work was among the earlier plans of the First Napoleon, who projected it as a means of counteracting British ascendancy in India, and gaining for France a portion of the commerce of the East. The project has been frequently revived since his time; but it was reserved for M. Ferdinand de Lesseps, the celebrated French engineer, to initiate the work, and carry it, as he probably will, to a successful termination. The difficulties in the way would have deterred a less ardent and earnest man. He had to overcome the apathy of some, the active opposition of others, and provide the capital requisite for the undertaking.

It was in 1852, we believe, that this French enthusiast, as some then called him, first attempted to form a company for the construc-

tion of the canal. He enlisted the Pasha of Egypt in the undertaking, and in 1855 obtained from him a firman granting the necessary assistance and powers. Engineers were employed to survey the route, who reported that there were no insurmountable difficulties in the way; so that in January, 1859, the "Universal Company of the Maritime Canal of Suez" was organized, with a capital of 200,000,000 francs (\$40,000,000,) and soon after the work was commenced. Ninety miles was the length of the cut to be made, the shorter and more direct route not being selected on account of the greater difficulties it presented. The depth determined upon was twenty-six feet below the low water level of the Mediterranean, and the width three hundred and twenty-seven feet on the surface. To obtain the low water level of the Mediterranean, the actual depth of the canal must average from twenty-five to thirty-five feet.

The chief engineering difficulties were those arising from the sandy, shifting nature of the soil, and the want of a good port on the Mediterranean side. The country is remarkably level, the greatest elevation being not more than from 30 to 45 feet above the adjoining seas, generally the soil is only five or six feet above the sealevel, and in some places it is so low that it is covered by swamps or marshes, and small lakes.

With respect to the present condition of the maritime canal, the report states that nearly half the distance between Port Said and Lake Timseh, about 40 miles, is already dug to the full width of 100 metres (327 feet) on the water line. About one-fourth of the route, or 20 miles, the full average depth of 26 feet from the surface has been reached, the sides sloping at an angle of 45 degrees. On the remainder dredgers of great capacity and novel construction are at work, and so decided are the improvements made in these dredging machines that excavations are being carried forward with greatly increased rapidity, and it is expected that this portion of the work will be entirely completed by the close of the present year.

The second half of the canal extends from Lake Timseh to Suez, and comprises the more ridgy or elevated part of the route. Lake Timseh is now filled with water from the Mediterranean to the level of the two seas. Through the Salt Marsh, or Bitter Lakes, as it is called, the land being at some points below the level of the Gulf of Suez, it was necessary to make the embankments by excavations of earth transported by lighters from other portions of the work. Fifteen hundred millions of cubic metres will be required for this purpose. The waters of the Mediterranean now extend about fifty miles into the desert, and in ten months they will be conducted to the Bitter Lakes. The dredgers are now in active operation on this portion of the route, and extract monthly a mass equal to from 25,000 to 30,000 cubic metres.

Simultaneously with the work on the canal, the process of improving the harbors on the Mediterranean and Suez sides is in active progress. On the Suez side there is no particular difficulty, there being a very fine harbor easily adapted to the wants of the new commerce. The roadstead of Suez is, however, being improved and cleared of obstructions, and a wet dock is in process of construction for ocean steamers. But on the Mediterranean side, at Port Said, the engineering difficulties are

greater, owing to the fact that sands impelled by the tides and winds obstruct the mouth of the harbor. On this account it is necessary to construct jetties or breakwaters, extending on either side nearly two miles into the sea. These jetties range from a depth in the sea of from eight to fifty-two metres. The Western jetty is already entirely raised above the water, with the exception of about a quarter of a mile, and one-half of the eastern jetty has been made in water fifty-two metres deep. This work is substantially done, and is almost as extensive as the great breakwater at Cherbourg. The fierce gales and heavy seas which prevail in this portion of the Mediterranean have had no effect thus far upon the huge blocks forming the jetties, and promise a secure refuge for the largest vessels. The sand has been dredged to a depth of fifteen feet in the inner port, comprising a space of sixty acres. By the end of the present year it will have been still further dredged until it reaches a depth of twenty-four feet, furnishing access to all description of trading vessels.

Another scheme undertaken by the company, and to a certain extent independent of the maritime canal, is the "fresh water canal." It is not, however, intended to be navigable as the term canal generally implies. It is better described as a large trench or cutting, for the purpose of conveying the water of the Nile from Cairo northward, curving to the east, through a tract of land purchased by the company, to Lake Timseh, before mentioned, and then southward to Suez. Before this was completed all the fresh water to be obtained at Suez was brought from Cairo by the railway. Large trains, conveying iron tanks filled from the river, were constantly passing along the line that conveyed the passengers by the overland route, from sea to sea. The whole line of the Ship Canal, from Suez to Port Said, runs either through the two salt water lakes on the Isthmus, the wide expanse of Menzaleh on the seacoast, or the soil of the Desert, "a barren land, where no water is." Labor is, of course, impossible without a certain and abundant supply of this element. This aqueduct was, therefore, a work of necessity, and has proved a success. It is also employed to irrigate such portions of the soil through which it passes as may be worth cultivating, and this secondary purpose has been fully answered, as may be seen in its fertilizing effects on the country along its route.

It is estimated that the entire cost of this great work, including the canals, harbor improvements, and material of traction for the passage of large vessels, will amount to 385,000,000 francs (\$77,000,000). This is about double the original estimates. The capital of 200,000,000 francs was increased by a loan of 100,000,000 francs, and a call for another 100,000,000 has been made, which has been favorably received by the stockholders. The instruments of labor worked by steam and in use on the Isthmus represent a total of 17,768 horse power, at a consumption of 12,219 tons of coal per month. The company has in its employment 13,000 laborers and artezans, of whom 6,388 are native Syrians and Egyptians, and the balance are Europeans. The distance between the two seas has become a continuous line of work shops; and numerous villages and towns have sprung up in the desert to accommodate the workmen, and the traders and laborers who supply their wants. The port of Said, situated on the spit of land that separates Lake Menzaleh

from the Mediterranean has increased from a wretched population of a few hundred to 8,000, with warehouses and buildings to accommodate the increased business and population. There is every indication that the termini on either side of the canal will become the sites of great cities, and centres of commerce.

It is evident that the completion of this canal will mark a new era in the history of commerce. There can be little doubt but that an immense portion of Eastern shipping will follow this new and shorter route. The only drawback is the want of sufficient guarantees that the canal shall be free to the commerce of all nations. This consideration led England to oppose the undertaking until it became apparent that further opposition would be useless. It has secured some privileges, but the work will be under the control of France, and that country can hardly fail to derive immense benefits from it. "As for ourselves, however, we possess in the Pacific Railroad, now speedily approaching completion, the means for an active competition for the Eastern trade independent of the Suez Canal. We can still further increase our facilities by the construction of the Panama Ship Canal, which offers fewer engineering difficulties than are being successfully encountered at Suez. This is a matter deserving the attention of capitalists here, and it is to be hoped that they will not be indifferent to the great issues which it involves."

RAILROAD EARNINGS FOR AUGUST.

The large increase in the grain crops has naturally induced an expectation of a corresponding gain in the earnings of the railroads. This result has followed; and yet not to the extent perhaps which might have been expected. During the five weeks ending August 31st, the receipts of wheat at Chicago, Milwaukee, Detroit and Toledo aggregated 3,883,002 bushels, against 1,796,499 bushels for the corresponding period of 1866; and the combined arrivals of other kinds of grain and of flour show a proportionate increase. It might reasonably be expected that, with a doubling of this very important class of freights, the earnings of the roads would furnish a very favorable exhibit. The tabulated results presented below, show, however, a gain for the month of August of only \$353,578 in a total of \$6,973,228, being only a trifle over 5 per cent. We think, however, that the explanation may be found in the fact that the breadstuffs shipments are as yet mostly confined to certain Western roads, or to the canals and lakes. By examining the returns this is made very clear, as will be seen from the August earnings of the Chicago and Alton, Chicago and Northwestern, Chicago and Rock Island, Illinois Central, Michigan Central, and Michigan Southern roads; but the roads connecting with the seaboard, as yet, compare poorly with last year. The gross earnings of the under-mentioned railroads for the month of August, 1866 and 1867, comparatively, and the difference (increase or decrease) between the two periods, are exhibited in the following statement:

Railroads.	1866.	1867.	Increase.	Decrease.
Atlantic and Great Western.....	\$523,649	\$475,267	\$.....	\$48,382
Chicago and Alton	387,369	431,464	34,115	.....
Chicago and Great Eastern.....	107,062	94,867	.....	12,195

Railroads.	1866.	1867.	Increase.	Decr' e.
Chicago and Northwestern.....	797,475	1,038,834	241,359	....
Chicago, Rock Island and Pacific	340,637	404,600	63,963	....
Erie.....	1,225,400	1,229,024	....	58,876
Illinois Central.....	578,253	684,377	106,124	....
Marietta and Cincinnati.....	106,921	114,716	7,795	....
Michigan Central.....	859,645	898,995	29,350	....
Michigan Southern.....	384,401	433,783	44,381	....
Milwaukee and Prairie du Chien.....	116,266	113,404	....	2,862
Milwaukee and St. Paul.....	907,068	905,436	....	1,632
Ohio and Mississippi.....	805,454	813,165	7,711	....
Pittsburg, Fort Wayne and Chicago.....	648,201	602,069	....	46,132
Toledo, Wabash and Western.....	396,248	364,723	....	31,525
Western Union.....	60,698	73,536	12,837	....
Total in August.....	\$6,619,650	\$6,973,228	\$353,578	....
Total in July.....	5,967,856	5,754,795	....	\$213,061
Total in June.....	6,706,446	5,815,741	....	890,705
Total in May.....	6,402,297	5,907,650	....	494,637
Total in April.....	5,473,127	5,812,788	339,661	....
Total in March.....	5,593,522	5,839,601	46,078	....
Total in February.....	4,664,535	4,798,978	124,443	....
Total in January.....	5,378,441	5,413,437	34,996	....
January-August, 8 months.....	\$46,805,555	\$46,116,168	\$689,387	....

It is also necessary, in making these comparisons, to keep in mind that the grain movement last year, owing to short crops, was very limited, and that, consequently, the railroad receipts were less than the previous year. The earnings of August, 1866 were about 8 per cent. below those of the same period of 1865; and the receipts of last month averaged 3 per cent. less than those of two years ago, the total for August of 15 of the above roads being in 1865 \$7,096,559, and this year \$6,578,361. Here, however, again an explanation may be found in the comparative breadstuffs movement during the two years 1865 and 1867. For instance, nearly all the grain that came forward during August last, was this year's product, while in 1865 there was a large surplus on hand of the old crop, so that the weekly receipts at the West during August, 1865, were in excess of this year's receipts, and hence the railroad earnings were larger than at present. It is also stated that the charges on the roads have, in some instances been reduced, and confirmatory evidence of it is found in the disproportion between the increase of traffic and that of earnings. This is certainly a change much needed for the agricultural welfare of the country. We have no statistics showing the *net* earnings of the roads; were they at hand, however, it would probably be found that the working expenses have been somewhat reduced, warranting a decline in the rates. The country cannot afford to pay the high prices for transportation which have been in force; and unless commerce is to be impeded, the roads must steadily reduce their charges, at the same time economizing their expenditures correspondingly. This policy alone can place the traffic upon a basis insuring a steady growth.

It will be seen from the above statement that the earnings of the sixteen roads enumerated show a decrease in the earnings for the first eight months of the year amounting to \$689,687, or about 1½ per cent.; the past month therefore shows an improvement upon the business of the year.

The gross earnings per mile of road operated for the same month of the two years, are shown in the table which follows:

Railroads.	Miles of road.		Earnings.		Difference.	
	1866.	1867.	1866.	1867.	Incr.	Dec.
Atlantic & Great Western.....	507	507	\$1,043	\$987	...	\$56
Chicago and Alton.....	280	280	1,263	1,505	242	...
Chicago and Great Eastern.....	234	234	477	432	...	45
Chicago and Northwestern.....	1,083	1,145	773	907	134	...
Chicago, Rock Island & Pacific.....	410	410	580	986	406	...
Erie.....	786	775	1,622	1,599	...	23
Illinois Central.....	708	708	517	996	479	...
Marietta and Cincinnati.....	251	251	436	457	21	...
Michigan Central.....	265	265	1,203	1,400	196	...
Michigan Southern.....	534	534	728	818	90	...
Milwaukee & Prairie du Chien.....	234	234	498	484	...	14
Milwaukee and St. Paul.....	375	375	745	789	44	...
Ohio and Mississippi.....	340	340	598	921	323	...
Pittsburg, Ft. Wayne and Chicago.....	465	463	1,236	1,256	20	...
Toledo, Wabash and Western.....	531	531	760	700	...	60
Western Union.....	177	177	843	415	...	428
Total in August.....	7,084 7,134		\$241	\$278	\$37	\$...
Total in July.....			248	268	...	20
Total in June.....			252	216	...	36
Total in May.....			212	280	...	68
Total in April.....			773	816	43	...
Total in March.....			795	791	...	4
Total in February.....			862	678	...	184
Total in January.....			764	780	...	16
January-August: 8 months.....	7,084	7,134	\$6,654	\$6,478	\$176	\$176

The earnings of the New York Central in August, 1866, were (654 miles) \$1,286,000, or \$1,966 37 per mile, and in 1867 (692 miles) \$1,374,000, or \$1,985 55 per mile; increase, \$88,000, or \$19 18 per mile.

THE PINCH IN THE MONEY MARKET.

The recent easy and plethoric condition of the loan market has suddenly passed off, and money lenders, instead of being glad to get 3 or 4 per cent., demand twice as much, or 7 per cent. for call loans, and often get it too. To these persons, as well as to others, the change no doubt is a very gratifying one. It certainly is so to the shrewd speculators who have profited by the resulting disturbance of values at the Produce and Stock Exchanges. Outside of a very narrow circle, however, such spasms are not regarded with so much satisfaction. The few may gain by them, but the many lose. Business languishes under a sensitive money market. The activity of commerce, the progress of material prosperity, the development of productive power, the force of industrial enterprise, every thing which makes the country rich and great, is fostered by monetary ease, and suffers from such spasmodic jerks as have briefly disturbed the money market during the last few days.

The effects of this sharp convulsion, it has been affirmed, have only been to punish a few speculators who richly deserve it. This view of the case is founded in error. Everybody knows that speculators are the very men to profit by such a catastrophe. They welcome fluctuations in the markets; because by these they live and by these they grow rich. Accordingly it is a significant fact that not a single failure took place at the Stock Exchange by the fall in securities, which was one of the minor symptoms of the nine days' Wall street scare. The money lenders, the stock operators, the speculators of all classes—these are the men

who gather their profits in such a spasm. Investors, men of business, the owners of securities and other property, find in it nothing but loss. The latter are sacrificed that the former may make money. The many lose that the few may gain.

This being so it is no wonder that the report has been current, and has been widely credited, that the whole trouble was the work of these persons, who had so much to gain by it. Certain money lenders, it is said, were disgusted at not being able to get more than 3 or 4 per cent. for their money. Speculators were disgusted that, in the long dead calm of the money market, stocks neither went up or down, and the mercurial values dealt in on 'Change were so stationary that no money was to be made by "bull" or "bear" tactics. To these men, or to a clique of them, it is claimed a bright idea suggested itself, and was successfully worked out. They would put up gold by a bold speculative venture. The political difficulties at Washington and other circumstances were favorable at home and abroad. They would then appeal to the Secretary of the Treasury, who was presumed to be nervously sensitive to the fluctuations of the Gold Room, and would get him to sell gold and Five-twenties to put down the premium on coin, and check the speculation themselves had raised. From such government sales a good profit could be made, as the "ring" could buy back cheaper the coin that they had sold at high figures. Moreover, the consequent locking up of currency in the Treasury by such sales at this time of the year, when the bank reserves are drained by remittances to the West; and the public, the bank officers, and the bank inspectors keep an anxious eye on the greenback reserve, was calculated to produce further trouble in the money and stock markets which might, by shrewd manœuvering and Wall street strategy, be made productive of large profits. Our readers, we suppose, are quite willing to admit that this marvellous story is too complicated, too subtle, too ingenious, and in many of its details too improbable to be accounted a fair history of the origin of the recent flurry. Discussion of its truth or falsehood, however, is irrelevant for our immediate purpose, which is rather to trace out practical lessons than to dispute facts not immediately available for future use. It is probable that such rumors never would have been put in circulation but for one unfortunate circumstance. On the 10th September the Sub-Treasury balance in this city was reduced to 111 millions, and 9 days later it stood at 124 millions, having risen 13 millions in nine days. This unhappy locking up of idle greenbacks was certainly to be regretted at a time when greenbacks did not seem to be wanted for any important Treasury emergency, and when they could be ill spared from the banks, and in fact could not, except temporarily, be spared at all in consequence of the turn in our interior exchanges, which caused a general rush for greenbacks. It seemed unfair to the banks while they were struggling with the difficulties incident to the fall drain for money to move the crops, to put upon them at an unlooked for moment this sudden burden.

But in reply to all this it is properly urged that the increase of the Treasury balance was only temporary, and was perhaps unavoidable. Moreover, the past record of the Secretary of the Treasury forbids the belief that he could for a moment favor the designs of speculators, one of whose chief objects was to depress government securities, and to

prevent the progress of the work Mr. McCulloch has most at heart at present—the consolidation of the floating public debt into long bonds. When the real causes of the late short panic come to be known two things no doubt will be satisfactorily proved. First, that whatever artificial causes have been at work to precipitate the advance in the rate of interest, and to develop that advance under the pressure of a monetary spasm there was no concert of action of which Mr. McCulloch was conscious between the Treasury or any of its officers, and the investments of speculators or money lenders, or any other interested persons whatever. Secondly, it will probably appear that the increase in the Treasury balance was made up to a much less degree than was supposed by the accumulation of greenbacks, and that the timely disbursements of the government, especially during the last eight or ten days, has done much to relieve the pressure which the Treasury has been unjustly supposed to have intentionally contributed to bring on.

The main question, however, is as to the money market of the immediate future. Will the rates of interest work easy during this fall, or are we to have a series of spasms and panics, or will there be a sharp, well-sustained 7 per cent. steady market? In answer to these questions we are pointed first to the supplies of capital, which are already ample and which the high rate of interest attracts hither, not only from our domestic sources of supply, but from the money markets of Europe, where money cannot be employed except at meagre rates of interest. While money rules at 2 per cent. in Lombard street, and Wall street offers 6 or 7, in these days of international activity and telegraphic communication it is easy to see the result.

But to make these stores of capital accessible, the state of the currency should be exempt from perturbation. It is to this point that the chief attention of the public turns. If our currency suffers contraction at this critical time, the effect of the contraction must inevitably be seen in the movements of the money market. To prevent the mischief of any such trouble, Congress authorized at the close of its last session the issue of 50 millions of three per cent. legal tender certificates, to take the place of the compound notes held by the banks as reserve. Congress, also, in the law of April, 1866, left it optional with the Secretary of the Treasury to omit contracting the greenback issues when such contraction was inexpedient or unsafe. Congress therefore is exempt from blame if the money market should be disturbed from any undue, ill-timed contraction of the currency. The responsibility rests with the Secretary of the Treasury. And if such trouble should occur, the result will inevitably be to add to the force, and to play into the hands of the inflationists, who are averse to all contraction whatsoever, who wish to dilute the currency and to shake the foundations of our financial fabric by further issues of paper money. Under these circumstances it is believed that Mr. McCulloch will omit the four million contraction of greenbacks until it can more safely be made, and that he will issue certificates to the banks in exchange for the 20 millions of compounds which mature next month. For obvious reasons it is also probable that he will not give out those certificates in exchange for Seven-thirties as he has been recommended to do. For by this he would virtually convert the Seven-thirties into a bank reserve. This course would

partake of the nature of inflation. It could be justified only by an emergency such as has not yet arisen, and such as, with judicious management, is not within the bounds of reasonable probability.

If these anticipations prove correct as to Mr. McCulloch's manipulations of the currency, and if the course of the money market be kept free of perturbation from currency irregularities, then there is good ground for believing that the predictions of stringency or panic will be disappointed, and our Fall business, on which so much depends, will not suffer decay or paralysis from this cause.

There are, however, other quarters from which apprehensions may arise. Public confidence is as important a condition for an easy money market as is an abundance of disengaged capital, and a stable financial machinery by which the movements of that capital may be facilitated between the lender and the borrower. How far this public confidence may be shaken by political causes and by foreign complications is a question which is well worthy the examination of every man whose business enterprises or speculative projects call for large monetary accommodation, or are tempting him to venture beyond his depth. For prudent conservative men, however, it is an advantage to be assured that, so far as the Treasury is concerned, nothing is doing, and nothing is likely to be done, that will tend to produce stringency; for the progress of the funding operations, which must be carried on up to June and July next, when the Seven-thirties mature, require, as an indispensable condition, that the money market should be steady and free from trouble.

RAILROADS AND CANALS FOR FREIGHT.

For some time past the comparative advantages of railways and canals in the transporting of freight have engaged public attention, and the Constitutional Convention, which has been in session at Albany through the summer, has occupied a long period in the discussion of the subject. This discussion has arisen out of the general question of canal enlargement, with regard to which great diversity of opinion has been developed, as is evidenced in the diverse reports presented to that body. For instance, the majority report of the Committee on Canals proposes an immediate enlargement of the locks together with certain improvements of the channel, as does also the minority report made by Hon. Israel T. Hatch, from the Committee on Finance. The majority, however, of this latter committee takes decided ground against any immediate enlargement, and proposes a modification of the financial article of the constitution, which will effectually preclude the undertaking of any such work for the next fifteen years; and a single member of the committee makes a special report to show that the canals of the State of New York have already passed the period of their greatest usefulness, and that henceforth we must depend upon railroads to meet the increasing wants of our internal commerce.

On a former occasion we submitted our reasons for deeming it injudicious to commit the State by constitutional provisions to either policy. It is very probable that during the present period when taxation, nation

al, State and local, is pressing heavily upon the people, the general sentiment will preponderate against such an increase of the State debt as would probably become necessary in case of enlargement. Nevertheless, it seems to be settled that the canals shall not be sold—the goose furnishing too good plucking to permit it to be done. In such case it is apparent that either the enlargement must be carried forward as soon as it is prudent, or some other avenue through the State must be furnished, to accommodate the carrying trade of the West. At the present time, the current of traffic sets strongly in the route across the State of New York, and our interests as well as our duty to sister States demand that we shall not obstruct this channel; that either the State must act, or the whole matter must be thrown open to private enterprise, regardless of its influence on our canal revenue. And just in this connection the question of freight railroads becomes of importance. If these are to supersede canals to any considerable extent, enlargement is entirely unnecessary. To our minds such an event appears possible, though we are aware of evident practical objections which must be first overcome. Yet as there is this possibility, and little probability of immediate enlargement, we see additional reason for reiterating our opinion that a public policy should be adopted which contemplates such a contingency and the State not be committed in its fundamental law to any fixed plan.

Were this question between canals and railroads one simply of rapidity of transportation, the railroads would certainly take the preference. The round trip from New York to Chicago and return is now accomplished in about twelve days by rail; while by water, thirty days more are required between this port and Buffalo. Even if steam should be introduced into the navigation of the canals this difference in time could not be diminished sufficiently to obviate the advantage in favor of the railroads. Then, again, the canals are closed and their navigation suspended during four or five months, while the railroads continue open the entire year. Besides, there is more or less danger of injury to breadstuffs from dampness, heating, etc., while making the slow journey by water, which is almost entirely obviated when they are carried by rail.

On account of these advantages our dealers in breadstuffs, to a large extent, even now supply the facilities afforded by railroads. They can often meet their orders in the city of New York in time, by bringing grain and flour at call from the entrepôts of the West, Toledo, Chicago and Milwaukee, and not be absolutely dependent on the supply already brought forward. The effect has been to diminish, to a remarkable extent the amount annually carried on the canals, while the railroads have steadily increased their business. The following table is compiled from the official documents, and shows the number of tons of breadstuffs transported on the Erie Canal and on the New York Central and the Erie Railroad for the past eleven years:

Year.	Erie Canal.	Central Rail'd.	Erie RR.
1856.....	475,885	263,027	145,948
1857.....	263,141	275,941	139,617
1858.....	484,551	301,607	184,006
1859.....	250,573	349,751	112,721
1860.....	710,188	343,572	127,325
1861.....	1,054,395	447,553	242,009
1862.....	1,777,399	469,935	261,264
1863.....	845,495	405,220	229,000
1864.....	605,991	431,511	218,000
1865.....	439,614	349,108	212,677
1866.....	269,195	425,000	207,243

These figures present the remarkable circumstance that our railroads are gradually but surely supplanting the canal for this species of freight, in spite of the fact that the transportation by railway is attended by disadvantages of a serious nature, many of which, however, could be obviated on a freight road. The freight cars are unsuitable, and the waste, therefore, in carrying breadstuffs is computed by shippers as high as $1\frac{1}{2}$ per cent. There is great negligence also on the part of the persons employed by the railroad companies in respect to keeping all the cars together on freight trains, and so bringing them through to their place of destination. Indeed forwarders declare that in every shipment one or two cars are sure to be left somewhere on the way, putting them to great annoyance, expense and loss of time by such inexcusable carelessness. Then there are other difficulties or disadvantages not so easily obviated. A single canal boat, for instance, will carry eight thousand bushels of wheat, which is equivalent to the load of twenty freight cars. And what is of even more importance, lighters must be employed at considerable extra expense to take the freight brought by railroads to the part of the city desired, whereas canal boats can land at any point. Then, again, there is the difficulty of loading and unloading the immense number of cars which would be needed for this freight business. As at present managed, more extensive accommodations would be required for the purpose than any road can furnish. But we think that when the question is reduced to that point, some way will be found of obviating the difficulty. Whatever success has in the past attended railroads in competing with canals has been in spite of these disadvantages.

As to the charges for transportation by water, they increase as the season advances. At the present period the cost of bringing a bushel of wheat from Chicago to New York, including changes at Buffalo, is, we believe, about twenty-nine cents. They may advance ten or fifteen cents before the close of navigation. If we assume forty cents as the possible cost before navigation closes, the cost of carrying a ton of wheat by water from Chicago to New York would be between thirteen and fourteen dollars. Even this extreme price, however, is less than the charges by rail; and with freight trains always made secondary to those carrying passengers, and compelled to give way to them, we cannot expect much improvement. As throwing light upon this question, we have prepared the following table showing the business done by the Erie Railroad—the earnings, expenses and profits on freight—for the six years ending Sept. 30 in each year:

Year.	Tons carried one mile.	Gross earnings.	Gross earnings per ton per mile in mills.	Gross expenses.	Expenses per ton in mills.	Profits.	Profits per ton per mile in mills.
1860.....	314,084,396	\$1,694,948	18.14	\$2,142,594	10.01	\$1,700,819	8.13
1861.....	351,350,127	4,351,464	17.34	2,355,934	9.30	2,414,530	8.04
1862.....	351,092,255	6,642,915	18.92	2,358,346	9.56	3,284,569	9.36
1863.....	402,670,861	8,432,234	20.80	2,593,981	9.64	4,538,253	11.15
1864.....	4,2013,644	9,855,068	22.94	6,147,831	14.57	3,707,237	8.77
1865.....	333,557,312	10,736,264	27.61	7,718,542	19.87	3,047,722	7.74

By this table we perceive that, in the year 1861, the actual cost to the railroad of transportation was less than one cent a mile for carrying a ton of freight; and that the average for six years, notwithstanding the extraordinary expenses of 1865, was twelve and six-tenths mills,

or about a cent and one-fourth. This includes, it should be kept in mind, all interest on capital, repairs of cars, track, etc., of which the company charge more than the proper share, we think, to the freight traffic, since the wear of express passenger business is so much greater than the freight business. Besides, as the freight trains must give way for passenger trains, they are sometimes kept waiting at stations for hours, and this loss must be made up in extra speed, which increases the expense many times.

It will therefore be perceived in a moment, that by the employment of a railroad exclusively for freight, these disadvantages would be generally obviated, and expenses of transportation would be greatly reduced. Cars suitable for the business would then be employed, and there would be good reason to expect no such vexations as leaving off one or two cars from a train at places along the route. There would be no necessity for a speed exceeding ten miles an hour, which would obviate to a great degree the wear of cars and track, and yet make headway as fast as is now the case at fifteen miles. One express train wears more than ten freight trains. No time would be lost by waiting at stations, but the trip could be a continued one at a slow rate of speed from point to point.

It is thought that on a railroad built substantially for the purpose, from fifty to one hundred cars can be drawn by a single engine, and, of course, very many of such trains could be placed on the road every day, if necessary. This would enable it to do all the transportation that would be offered; and it is obvious that it could be at cheap and yet remunerative prices. As shown above the cost for wear of cars and track, and for other expenses, ought to be largely reduced from the present rates. It would appear, therefore, that if the average cost of the last six years of one and one-fourth cents per mile should be received for every ton of freight, a fair proportion of that amount would be net profit. At that rate the total charge from Chicago to New York would be about \$13.75 per ton for wheat, which is but little more than is charged for its transportation by water.

Imperfect as the estimates are which we have displayed, they seem to indicate sufficient uncertainty with regard to freight transportation, to make us hesitate before inserting a provision in the Constitution, committing the State to any certain fixed policy with regard to our canals. We would approve of leaving that instrument open, however, so that the Legislature, in case of any contingency, may have the power to act as necessity may require. The people do not desire a hide-bound policy, which will not allow them to take advantage of future developments or improvements.

COTTON MOVEMENT AND CROP FOR 1866-7.

(Taken from the *COMMERCIAL AND FINANCIAL CHRONICLE*, Sept. 21.)

We are now able to give our figures showing the total crop and movement of cotton in the United States for the year ending September 1, 1867. The receipts, as will be seen, very nearly approximate those of last year, the total

reaching 2,019,271 bales, against 2,193,987 bales for the previous twelve months, indicating a decrease in the receipts this year of only 174,716 bales. It would be impossible to state with accuracy what proportion of this aggregate was the product of the last year, estimates differing so widely with regard to the amount of the old crop not brought forward at the close of 1865-6. We think, however, we may safely take this old surplus at 300,000 bales, and shall then have left about 1,700,000 bales as the total product of the past season. The new year begins with an unusually small stock in the interior, and we must therefore look almost entirely to the new crop for our receipts during the coming twelve months. We now bring forward our table showing the total receipts for each of the last two years, and the foreign exports the past year. In the last column will be found the stocks August 31, 1867:

Receipts and Exports of Cotton (bales) from September 1, 1866, to September 1, 1867, and stocks at latter date.

Ports.	Receipts and Exports		Exported year end. Sept. 1, '67 to—		Stocks	
	Sept. 1, 1867.	Sept. 1, 1866.	Great Britain.	France.	Other Foreign.	Total. Sept. 1, 1867.
New Orleans.....	702,181	711,629	403,591	160,803	54,897	618,940 15,256
Alabama.....	239,516	439,102	143,566	4,293	3,308	163,494 2,714
South Carolina.....	163,247	112,463	75,647	3,594	1,895	80,896 1,238
Georgia.....	243,601	258,798	111,699	969	1,550	124,101 683
Texas.....	186,495	175,065	60,751	.....	16,173	76,918 2,233
Florida.....	87,461	149,423	2,019	.....	.....	3,109 5
North Carolina.....	33,633	64,653	634	.....	.....	534
Virginia.....	137,897	39,093	13,011	.....	.....	13,011 2,589
New York.....	119,601	141,659	375,306	33,460	66,003	469,698 41,497
Boston.....	33,469	21,096	16,694	.....	890	17,014 10,000
Philadelphia.....	53,555	53,739	3,155	.....	.....	3,155 2,000
Baltimore.....	2,721	3,300	7,890	.....	156	7,976 2,006
Portland Maine.....	.....	.....	108	.....	.....	108
San Francisco.....	.....	.....	23	.....	.....	23
Shipped to manuf's from Tenn., &c.....	42,080	35,000	.....	.....	.....	..... .....
Total.....	2,019,271	2,193,987	1,212,473	198,147	144,169	1,553,787 87,155
Last year.....	2,193,987	.....	1,293,377	223,593	71,817	1,553,497 231,179
Increase this year.....	.....	.....	.....	.....	64,352	6,350
Decrease this year.....	174,716	.....	41,905	24,446	.....	193,094

The following is our detailed statement of the receipts of cotton through the year (or as it is called, the cotton crop for 1866-7), and for comparison we bring forward our figures for 1865-6:

Louisiana.			
Exported from New Orleans:			
	1866-7		1865-6
To foreign ports.....	618,940	.....	516,188
To coastwise ports.....	243,376	.....	253,355
Stock at close of year.....	15,256	863,573	102,063
Deduct:			
Received from Mobile.....	36,970	.....	36,433
Received from Montgomery.....	10,792	.....	4,878
Received from Florida.....	11,910	.....	12,735
Received from Texas.....	19,081	.....	52,111
Stock beginning of year.....	102,063	180,441	52,239
Total product for the year.....	.....	702,181	711,629
Alabama.			
Exported from Mobile:			
	1866-7		1865-6
To foreign ports.....	153,494	.....	370,981
To coastwise ports.....	98,158	.....	143,764
To New Orleans from Mobile.....	10,792	.....	4,878
Burnt at Mobile.....	2,437	.....	6,307
Stock at close of year.....	2,714	263,523	26,004
Deduct stock at beginning of year.....	.....	29,516	24,390
Total product for year.....	.....	269,516	429,128

* These are the shipments from Tennessee, &c., the total being 256,840 bales, as may be seen more fully in a subsequent table. The amount shipped to manufacturers is estimated.

Texas.

Exported from Galveston:			
To foreign ports.....	70,918	64,898	
To coastwise ports.....	118,986	115,943	
Stock at close of year.....	2,323	8,511	100,000
Deduct stock at beginning of year.....		7,590	12,997
Total product for year.....		184,495	175,956

Florida.

Exported from Apalachicola, St. Marks, &c.:			
To foreign ports.....	2,019	87,977	
To coastwise ports.....	54,156	28,943	
Burnt at Apalachicola.....	1,069		
Stock at close of year.....	5	163	162,000
Deduct—			
Stock beginning of year.....	163	12,500	
Recovered of burnt cotton.....	656	513	12,000
Total product for year.....		97,461	140,000

Georgia.

Exported:			
To foreign ports—Upland.....	105,670	88,212	
“ “—Sea Island.....	7,451	4,592	
To coastwise ports—Upland.....	126,118	161,056	
“ “—Sea Island.....	6,023	5,112	
Burnt at Savannah.....	51		
Exported from Darien to North'n ports.....	745	459	
Stock at Savannah close of year.....	693	257,703	200,000
Deduct—			
Received from Florida.....	5,822		
Stock beginning of year.....	2,940	2,108	4,005
		243,601	200,000

South Carolina.

Exported from Charleston:			
To foreign ports—Upland.....	72,909	51,619	
“ “—Sea Island.....	7,997	2,305	
To coastwise ports—Upland.....	80,945	80,584	
“ “—Sea Island.....	5,706	2,485	
Exported from Georgetown, Port Royal, &c., to North-			
ern ports.....	1,523	1,701	
Burnt at Beaufort and Hilton Head.....	45		
Stock at Charleston end of year.....	1,222	172,429	125,000
Deduct:			
Received from Florida.....	5,647	945	
Stock at Charleston beginning of year.....	6,525	1,973	2,977
		162,247	125,000

North Carolina.

Exported:			
To foreign ports.....	534	21	
To coastwise ports.....	20,089	64,623	64,000
Total product for year.....		20,623	64,000

Virginia.

Exported:			
To foreign ports.....	12,011		
To domestic ports.....	105,223	22,204	
Manufactured (taken from Petersburg).....	2,000	6,223	
Burnt at Norfolk.....	2,500		
Stock Sep., 1, '87, at Petersburg.....	1,039		
“ “ Norfolk &c.....	1,500	2,500	2,400
Deduct stock Sept. 1, 1886.....		2,400	
		127,807	20,000

Tennessee, &c.

Shipments			
From Memphis.....	226,806	218,504	
From Nashville, Columbus, Hickman, Ky., &c.....	22,459	70,000	
Stock at Memphis and Nashville at end of year.....	1,481	310,736	10,631
Deduct			
Shipped direct to manufacturers*.....	42,000	20,000	
Shipped to New Orleans.....	42,615	23,123	
Stock beginning of year.....	10,631	12,420	20,000
Shipments to New York, Boston, &c.....		7214,840	212,000

* This estimate of shipments direct to manufacturers from Tennessee, &c., includes not only the amount so shipped to points on the Ohio, but throughout the whole North.

† This is the amount received from Tennessee, &c., at New York, Baltimore, Boston and Philadelphia, as follows:—Received at New York, 119,601 bales; at Baltimore, 2,721 bales; at Boston, 22,402 bales; at Philadelphia, 59,556 bales—as may be more fully seen in our previous tables.

Add shipped to manufacturers, as above.....	43,000	35,000
Total product of the year, except amount shipped to New Orleans.....	330,840	253,753
From the foregoing it will be seen that the total crop of the United States for 1866-7 was.....		2,019,271
Total exports from the United States for 1866-7.....		1,558,787

Below we give the total crop each year since 1820 :

Bales.	Bales.	Bales.
1825-6..... 2,193,837	1847-8..... 2,247,634	1869-8..... 1,470,488
1861-5..... * (no record)	1846-7..... 1,778,651	1881-2..... 987,477
1860-1..... 3,656,086	1845-6..... 2,100,587	1880-1..... 1,038,848
1859-60..... 4,660,770	1844-5..... 2,204,503	1880-30..... 978,845
1858-9..... 3,851,481	1843-4..... 2,030,400	1889-9..... 870,415
1857-8..... 3,113,963	1842-3..... 2,378,575	1897-8..... 737,593
1856-7..... 2,989,519	1841-2..... 1,683,574	1896-7..... 957,281
1855-6..... 3,527,845	1840-1..... 1,631,945	1895-6..... 730,097
1854-5..... 2,847,339	1839-40..... 2,177,335	1894-5..... 569,949
1853-4..... 2,639,027	1838-9..... 1,860,539	1893-4..... 809,159
1852-3..... 3,262,833	1837-8..... 1,601,497	1892-3..... 496,000
1851-2..... 3,015,949	1836-7..... 1,422,540	1891-2..... 455,000
1850-1..... 2,355,257	1835-6..... 1,220,735	1890-1..... 480,000
1849-50..... 2,060,706	1834-5..... 1,254,323	
1848-9..... 2,735,596	1833-4..... 1,305,344	

The crop of Sea Island the past year has been as follows: Florida, 12,632 bales; Georgia, 7,646 bales; South Carolina, 12,060 bales—total, 32,328 bales, the particulars of which are set out below :

Florida—Bales.....	12,632
Georgia—Exported Foreign.....	7,431
Domestic ports.....	6,008
Stock end of year.....	123— 12,615
Deduct Received from from Florida.....	5,533
Stock beginning of year.....	447— 5,969
Total Sea Island and Georgia.....	7,646— 7,646
South Carolina—Exported foreign.....	7,987
Domestic ports.....	9,408
Stock end of year.....	194— 17,594
Deduct received from Florida.....	5,389
Stock beginning of year.....	385— 5,004
	11,900

Total Crop of Sea Islands..... 32,328

The crop of Sea Islands during former years has been as follows :

1822-4..... bales 39,636	1856-7..... bales 45,314	1859-60..... bales 46,649
1844-5..... 40,841	1857-8..... 40,566	1860-61..... No record
1855-6..... 44,513	1858-9..... 47,593	

The total exports for the year reach as above 1,558,787 bales, which is an increase of 6,330 bales on last year's total, when the figures were 1,552,457 bales. If we average these bales at 450 lbs., and the price received at 12d. per lb., the value in gold of our cotton exports for the year was 170 millions of dollars. These figures very forcibly exhibit the impolicy of cotton regulations and taxes which fetter production. For the convenience of our readers we bring forward the exports of previous years, giving in the table below the foreign movement for five years :

Total Exports of Cotton to Foreign Ports for Five Years.

From—	1860.	1860.	1861.	1865.	1867.
New Orleans..... bales.	1,580,581	2,005,663	1,738,073	518,186	618,940
Mobile.....	514,985	659,481	456,431	270,964	153,424
South Carolina.....	330,924	385,770	214,888	53,834	80,896

* Authorities differ as to the amount raised during the war period. Some estimate it as low as 2,300,000 bales for the four years, and others as high as 7,600,000 bales.

From—	1882.	1880.	1881.	1882.	1887.
Georgia.....	203,041	237,755	202,187	222,905	114,121
Texas.....	75,534	111,967	63,309	64,338	73,318
Florida.....	40,853	59,108	38,073	37,977	2,019
North Carolina.....	.....	.....	195	21	534
Virginia.....	.....	2,350	810	.....	12,021
New York.....	132,460	203,022	243,049	405,423	469,085
Boston.....	8,267	9,694	22,225	12,014	17,014
Philadelphia.....	1,715	293	2,793	2,035	2,152
Baltimore.....	104	257	3,545	8,709	7,925
Portland, Maine.....	.....	.....	.....	.....	262
San Francisco.....	.....	.....	.....	.....	20
Total from the United States....	3,031,408	3,774,173	3,137,568	1,532,487	1,892,957

In the above table of exports we have omitted, for obvious reasons, the figures for the period during the war. The home consumption of cotton the past year has been as follows:

Consumption.

Total crop of the United States, as above stated.....	2,012,971
Stock on hand commencement of year, Sept. 1, 1886—	
In Southern ports.....	102,896
In Northern ports.....	120,855— 223,751
Total supply during the year ending Sept. 1, 1887.....	2,236,722
Of this supply there has been	
Exported to foreign ports during the year.....	1,558,787
Burnt at New York.....	5,055
Burnt in the South.....	6,153
Now on hand (September 1, 1887)—	
In Northern ports.....	52,497
In Southern ports.....	20,655— 1,022,122
Total consumed in the United States during the year ending Sept. 1, 1887...	649,521
Estimated consumption in the Southern States.....	70,000
Consumption in the Northern states for the year.....	579,521

This as will be seen is equal to a consumption in the Northern states of about 11,000 bales per week. The total consumption in the United States each year since 1847, has been as follows:

Year.	Total, U. S.	Year.	Total, U. S.	Year.	Total, U. S.
1847-8.....bales	618,044	1859-60.....bales	787,225	1859-60.....bales	772,023
1848-9.....	642,435	1860-1.....	716,419	1860-1.....	562,749
1849-50.....	613,498	1861-2.....	770,720	1861-2.....	No record
1850-1.....	435,614	1862-3.....	819,225	1862-3.....	657,225
1851-2.....	699,603	1863-4.....	895,528	1863-4.....	647,225
1852-3.....	808,725	1864-5.....	927,651		

In connection with the figures we have given above, the following indicating the imports of cotton at Liverpool for the year ending August 31, 1866, and 1867, and the stocks at that port and on the Continent August 31 of each year will be of interest:

Imports of Cotton at Liverpool for years ending August 31, 1867 and 1866, and Stock at dates.

	Imports.		Stocks.	
	Year end'g Aug. 31, 1867.	Year end'g Aug. 31, 1866.	Aug. 31, 1867.	Aug. 31, 1866.
American.....bales	1,229,614	1,230,709	312,550	224,010
Brazilian.....	297,963	449,070	125,190	102,320
Egyptian, Smyrna, &c.....	208,228	228,409	45,500	33,540
West Indian.....	101,226	107,701	27,900	23,120
East Indian.....	1,159,426	1,566,865	273,850	428,210
China and Japan.....	4,616	14,352	1,570	7,329
Total.....	3,102,158	3,654,179	798,560	688,140
Stock at London.....			96,620	92,229
" at Havre.....			102,000	120,000
" at other ports (estimated).....			20,000	25,000
Total stocks in Europe....			1,022,240	1,221,158

To complete our record, we give below a table showing the price of middling uplands at New York and Liverpool once a week during the last two years :

Prices of Cotton at New York and Liverpool two years.

Date.	1866-7		1865-6		Date.	1866-7		1865-6	
	New York.	Liverpool.	New York.	Liverpool.		New York.	Liverpool.	New York.	Liverpool.
Sept. 7.....	22	18	44	18½	March 8.....	29½	18½	40	18½
" 14.....	23½	18½	45	..	" 15.....	31½	18½	41	19½
" 21.....	23½	18½	45	..	" 22.....	30½	18½	40	19½
" 28.....	23	18½	44½	19	" 29.....	30	18½	40	19½
Oct. 5.....	29½	14½	49	24	April 5.....	27½	12½	38	18
" 12.....	40	15	50	24½	" 12.....	27	11½	37	15½
" 19.....	43	15½	57	23½	" 19.....	26	11½	36	14½
" 26.....	40	15	58	22	" 26.....	26½	10½	31	15½
Nov. 2.....	30	15	56	20½	May 3.....	27	11½	33	13½
" 9.....	27	14½	51	20½	" 10.....	27	11	34	13½
" 16.....	28	14	51	19½	" 17.....	28½	11½	35	1½
" 23.....	24	14	53	..	" 24.....	17	11	40	13
" 30.....	23½	14	49	20½	" 31.....	27½	11½	32	13½
Dec. 7.....	23½	14	49	..	June 7.....	27	11½	27	12
" 14.....	24	14½	49	..	" 14.....	27	11½	29	14
" 21.....	24½	14½	51	21	" 21.....	26½	11½	27	13½
" 28.....	23½	14½	51½	..	" 28.....	26	11	27	13½
Jan. 4.....	25½	15½	51	20½	July 5.....	26	10½	25	14
" 11.....	24½	14½	50	19½	" 12.....	26½	10½	25	14
" 18.....	26	14½	51	19½	" 19.....	26½	10½	26	18½
" 25.....	23	14½	47	19½	" 26.....	27	10½	26	14
Feb. 1.....	23½	14½	48	18½	Aug. 2.....	28	10½	26	14
" 8.....	23	14	46	19½	" 9.....	28	10½	24	13½
" 15.....	23	14	44	19	" 16.....	28½	10½	24	13½
" 22.....	23	18½	45	18½	" 23.....	28½	10½	23	13½
March 1.....	23	18½	44	18½	" 30.....	27	10½	23	13½

CLEVELAND AND TOLEDO RAILROAD.

This road extends from Cleveland to Toledo, 112½ miles, forming a link in the great lake-shore line of railroads from Buffalo westward. A lateral line also extends from Cleveland to Sandusky, 60 miles. Until last year a section of the Cleveland, Columbus and Cincinnati Railroad, from Cleveland to Grafton, 25 miles was used by this company, but the new line between Oberlin and Elyria having been opened on the 10th September last, the use of that road was discontinued.

The fiscal year of the company closes on the 30th April.

The stock of engines and cars on the road at the commencement of 1862-63, and at the close of each succeeding year was as follows :

	May 1, '63.	1863-63.	1863-64.	1864-65.	1865-66.	1866-67.
Locomotive engines.....	28	28	37	37	37	40
Passenger and mail cars.....	61	56	54	54	58	53
Freight cars.....	303	479	636	638	810	866
Cars of all kinds.....	454	535	690	692	866	919

—not including working and gravel cars.

The operations on the road yearly are shown in the statements which follow, viz. :

1. Passenger traffic:

	1862-63.	1863-64.	1864-65.	1865-66.	1866-67.
Going East.... { Thro'.....	64,043	52,063	142,006	86,366	79,551
Way.....	93,096	143,609	146,097	136,219	172,889
Total.....	163,739	234,672	288,076	270,575	252,890

	1862-63.	1863-64.	1864-65.	1865-66.	1866-67.
Going West....	Thro'..... 60,791	93,130	184,773	186,504	111,860
	Way..... 100,337	146,548	165,530	300,677	178,494
	Total..... 161,130	339,678	350,303	487,181	290,354
Passengers both ways.....	322,260	494,245	580,173	607,436	340,222
Miles travelled.....	20,650,378	23,493,929	23,153,340	27,263,760	22,121,304
Earnings per mile.....	\$3 78	\$3 76	\$3 86	\$3 23	\$3 37

2. Freight traffic.

	1862-63.	1863-64.	1864-65.	1865-66.	1866-67.
Tonnage East....	Thro'..... 301,285	197,019	159,913	230,109	237,306
	Way..... 73,083	97,778	104,086	71,797	90,166
	Total..... 374,468	294,797	263,949	300,906	327,472
	Thro'..... 71,387	92,725	90,983	116,303	120,303
Tonnage West....	Way..... 87,963	54,901	55,469	54,154	73,803
	Total..... 109,350	147,626	146,453	172,357	226,406
Tons both ways.....	383,808	442,417	410,401	473,263	553,878
Miles transportation.....	25,510,471	37,644,347	34,791,392	44,233,973	61,226,114
Earnings per mile.....	\$3 34	\$3 41	\$3 89	\$3 63	\$3 38

The earnings and expense accounts yearly for the last five years are thus reported :

	1863-4.	1863-4.	1864-5.	1865-6.	1866-7.
Passenger.....	\$564,536 83	\$784,059 41	\$1,032,470 47	\$1,140,968 81	\$697,132 11
Freight....			979,553 01	1,139,731 84	1,413,444 97
Mail.....			20,949 93	25,349 33	25,339 89
Express....	797,000 44	907,306 43	78,319 18	32,340 89	113,797 77
Total gross earnings.....	\$1,361,537 26	\$1,691,365 83	\$2,104,089 64	\$2,398,398 03	\$2,249,714 74
Op'g exp's.....	\$544,453 49	\$739,373 54	\$1,080,756 04	\$1,117,074 50	\$1,264,237 75
U. S. tax's.....			63,873 64	69,454 24	67,339 41
State tax's.....			48,015 65	61,535 83	54,429 36
Rents.....			59,577 98	65,336 96	61,642 23
Exchange, disc., &c.....	373,308 11	370,947 87	37,036 83	12,530 86	21,363 23
Int'nt on bonds.....			179,869 22	173,636 23	202,397 65
Expenses & Int'nt.....	\$916,866 60	\$1,106,320 41	\$1,440,197 20	\$1,336,796 77	\$1,760,355 23
Dividends.....	133,733 00	337,533 00	492,643 10	637,023 00	733,233 00
Surplus....	311,099 66	247,532 42	163,299 34	294,059 25	1,256 14
Total ...	\$1,361,537 26	\$1,691,365 83	\$2,104,089 64	\$2,398,398 03	\$2,249,714 74

Besides the dividends above noted there was paid in August, 1864, an extra 10 per cent. dividend (\$491,326) from accumulated surplus income.

The results of the business of the company from September 1 1853, yearly to April 30, 1867, are given in the following summaries. The receipts and expenses have been as follows :

Year ending—	Passenger.	Gross Earnings Freight & Mail.	Total.	Operating expenses.	Earnings less expenses.
May 31, 1854*.....	\$409,543 30	\$23,048 06	\$797,570 37	\$319,069 15	\$378,501 22
" 1855.....	573,903 79	307,516 68	780,890 43	373,046 98	407,843 45
" 1856.....	631,703 30	279,788 83	911,471 15	463,009 09	448,462 06
Apr. 30, 1857*.....	677,417 86	378,496 98	1,055,909 79	516,019 91	539,889 88
" 1858.....	568,370 41	241,898 05	890,268 46	494,463 01	395,805 45
" 1859.....	486,537 45	313,618 20	798,155 65	383,699 73	414,455 92
" 1860.....	494,323 37	409,047 49	903,371 86	397,736 51	505,635 35
" 1861.....	423,354 65	468,716 43	919,971 08	426,015 40	493,955 68
" 1862.....	497,395 35	578,253 17	1,003,637 23	460,149 23	543,488 00
" 1863.....	524,536 83	797,000 44	1,361,537 26	544,453 49	817,083 77
" 1864.....	784,059 41	907,306 43	1,691,365 83	739,373 54	951,992 29
" 1865.....	1,032,470 47	1,005,409 99	2,104,089 64	1,080,756 04	1,023,333 60
" 1866.....	1,140,968 81	1,139,731 84	2,383,868 03	1,117,074 50	1,266,793 53
" 1867.....	1,032,470 47	1,441,394 89	2,492,214 89	1,336,796 77	1,155,418 12

The disposition made of the earnings less expenses (profits) in each year, is shown in the following statement :

Years ending	Int., profit & loss, extraordinary expenses, &c.	Dividends, &c. amount.	Rate.	Residual.
May 31, 1854*.....	\$67,478 33	\$133,679 87	5	Debtor. Credit.
" 1855.....	194,198 00	278,018 73	10	
" 1856.....	154,297 00	241,175 00	8	

* Sept. 1, 1853, to May 31, 1854—9 months.

Years ending	Expenses, &c.	Amount.	Rate.	Debtor.	Creditor.
April 30, 1887*	822,287 93	267,007 00	8	46,496 05	
" 1888	880,468 76	..	..	..	53,286 00
" 1889	876,968 89	..	..	..	39,669 08
" 1890	839,436 98	..	..	205,404 92	76,108 93
" 1891	885,331 30	..	..	..	123,634 89
" 1892	860,400 77	100,314 00	8	..	83,668 82
" 1893	873,908 11	133,763 00	4	..	111,099 66
" 1894	876,947 87	857,589 00	8	..	247,533 43
" 1895	803,481 26	493,643 10	10	..	160,390 34
		491,236 00	10	491,236 00	
" 1896	406,713 37	687,023 00	18	..	236,020 25
" 1897	377,487 60	736,918 00	14	..	1,001 14

Since the commencement of operations eighteen dividends have been paid on the stock of the company, being 93 per cent. on the issues at dates, and amounting to \$3,888,466 62. The balance to credit of income at the close of 1866-67, amounted to \$640,944 12.

The financial condition of the company, as exhibited on the yearly balance sheet (made up to June 1), is shown in the following statement:

	1998.	1994.	1995.	1996.	1997.
	\$	\$	\$	\$	\$
Capital stock.....	3,395,900 00	4,654,900 00	4,660,000 00	4,841,000 00	5,000,000 00
Bonded debt.....	3,697,558 00	2,490,990 00	2,614,810 00	2,744,390 00	2,973,185 00
Construction, and iron fund.....		117,539 00	126,899 36		
Bills payable.....		4,980 90	52,741 90	8,741 90	
Accounts current.....	30,597 11	45,790 65	68,000 28	85,294 77	34,949 06
May earnings collected.....	65,496 06	73,019 06	73,454 77	73,090 26	99,601 61
Income balance.....	523,147 37	769,940 49	440,963 73	666,942 98	607,944 13
Total.....	7,510,593 54	8,107,007 61	8,070,980 01	8,369,919 41	8,773,763 81

Against which are charged the following, viz :]

Real and property.....	6,700,425 53	6,960,573 83	6,989,573 83	6,973,156 75	6,901,816 01
Union depot, Cleveland.....		13,573 95			
Equipment.....	580,797 50	600,357 50	734,443 82	585,799 28	974,605 23
Stocks and bonds.....	53,026 00	53,026 00	53,715 75	53,715 10	51,744 88
Real estate.....	34,210 68	34,210 68	35,014 89	37,317 18	50,140 69
Fuel and materials.....	108,818 64	200,120 47	208,701 94	218,001 40	347,445 40
Bills receivable.....	61,503 21	62,591 04	63,514 48	17,501 43	10,901 43
Cash on hand.....	130,261 59	130,463 81	39,011 64	173,613 37	91,738 08
Accounts current.....	115,469 83	20,943 78	66,097 23	6,554 90	23,065 96
Standing fund contributions.....	187,813 08	173,790 89	197,790 89	281,790 89	340,790 89
Total.....	7,510,596 54	8,107,007 61	8,070,880 01	8,360,819 41	8,673,763 81

The following is a comparative statement of the bonded indebtedness of the company as given in their last five annual reports:

RECORDED & INDEXED--JUNE 1, 1893-97.

[illegible]

* June 1, 1856, to April 30, 1857--11 months.

The market value of the company's stock, as indicated by sales at the New York Stock Exchange (lowest and highest in each month,) is shown in the following compilation from the records :

	1861-2.	1862-3.	1863-4.	1864-5.	1865-6.	1866-7.
July.....	45 @ 49½	107 @ 117	121 @ 144	101 @ 104	108½ @ 116½	108½ @ 116½
August.....	40½ @ 84½	118 @ 128	125½ @ 124	96½ @ 102	115½ @ 117	115½ @ 117
September.....	82½ @ 69½	113 @ 121	108 @ 126	108 @ 106	114½ @ 122	114½ @ 122
October.....	87½ @ 78	114 @ 120	95 @ 116	110 @ 111	112½ @ 122½	112½ @ 122½
November.....	65½ @ 70½	113 @ 119½	108 @ 114½	108½ @ 105	111½ @ 121½	111½ @ 121½
December.....	66 @ 72½	109 @ 121	107 @ 112½	108½ @ 115	111½ @ 123	111½ @ 123
January.....	71½ @ 97	120 @ 141	108 @ 123	108 @ 118½	117 @ 123½	117 @ 123½
February.....	80½ @ 98½	128½ @ 149½	114 @ 115	105 @ 108½	117 @ 121	117 @ 121
March.....	59½ @ 88½	143 @ 151½	90 @ 108	107 @ 118	116 @ 122	116 @ 122
April.....	92½ @ 106½	135 @ 157	92 @ 103	99½ @ 103½	108½ @ 115	108½ @ 115
May.....	104 @ 117	145 @ 154½	95 @ 108	103 @ 105½	112½ @ 114	112½ @ 114
June.....	105 @ 116½	135 @ 151½	98 @ 106	104½ @ 107	112½ @ 123½	112½ @ 123½
Year.....	45 @ 117	107 @ 157	90 @ 144	96½ @ 115	105½ @ 123½	105½ @ 123½

The range in July and August, 1867, was 119½@126, and 121½@127½. The contemplated consolidation of the company with the Cleveland, Painesville and Ashtabula Company has had a very favorable effect on their stock.

PUBLIC LANDS OF THE UNITED STATES.

(Concluded from page 216, vol. 57.)

LEGISLATION IN REGARD TO MINERAL INTERESTS.

The mineral interests in the public lands have been the subject of legislation during a period of eighty-one years. The ordinance of 20th May, 1785, reserved one-third part of all gold, silver, lead, and copper mines; the act of 3d of March, 1807, dealt with lead mines; the enactment of 3d of March, 1829, authorized their sale in Missouri; the pre-emption act of 4th of September, 1841, excluded from its provisions known salines of mines; the act of July 1, 1864, requires coal lands, which, as mines, are excluded from the pre-emption of 1841, to be offered at twenty dollars minimum, making them pre-emptible at that rate.

In the case of the *United States vs. Gear*, 3 Howard, 1845, it was held that it was not intended to subject lead mines to ordinary sale or pre-emption in certain districts created by act of 26th of June, 1834.

In Attorney General's opinion, dated April 18, 1846, respecting mineral lands on Isle Royal, in Lake Superior, it was stated that "salines, gold, silver, lead, and copper mines" were reserved for "future disposal of Congress."

The act of July 11, 1846, required the lead mines in Illinois, Arkansas, Missouri, and Iowa, to be offered, interdicting pre-emption until after offering, and then at a minimum of \$2 50 per acre, but if not taken at private entry within a year of the public sale to be subject to sale as other lands.

The act of 1st of March, 1847, in creating the Lake Superior district, and directing geological survey, authorizes the sale of lands containing "copper, lead, or other valuable ores," with \$5 per acre minimum.

The act of 3d of March, 1847, for organizing the Chippewa district, Wisconsin, and also authorizing geological survey, awards the privilege of purchase, at \$5 per acre, to occupants at the date of the law, the super-

vision of mines, by act of 3d of March, 1849, having been transferred to the Secretary of the Interior.

In opinion of 28th of August, 1850, the Attorney General held that lands containing "iron ore merely" are not the "mineral lands" referred to in the 2d section of said act of 1st March, 1847.

By the law of 26th of September, 1850, mineral tracts in Lake Superior and Chippewa districts were to be disposed of as other public lands.

The act of September 27, 1850, creating the office of Surveyor General of Oregon and making donations, excludes "mineral lands" or reserved salines. By the treaty of 1851 with Peru, Peruvians are allowed to work for gold in California; the third section of act March 3, 1853, for the surveys in that State, allowing only "township" lines to be extended over lands mineral or unfit for cultivation; the sixth section excepting mineral tracts from pre-emption.

The act of July 22, 1854, establishing the offices of Surveyors General of New Mexico, Kansas and Nebraska, excludes from the privileges it concedes to individuals "mineral or school lands, salines, military or other reservations."

The Attorney General's opinion of February 14, 1860, states that Congress had not then made any provision concerning mineral lands in California, except reserving from pre-emption and donation.

The act of July 1, 1864, for the disposal of coal land and town property, allows coal lands not liable under past legislation to ordinary private entry to be taken or pre-empted at \$20 minimum per acre.

The act of July 4, 1866, giving authority for varying surveys in Nevada from "rectangular form to suit the circumstances of the country," reserves from sale "in all cases lands valuable for mines of gold, silver, quicksilver or copper."

The last and most important expression of the public will in these respects is found in the act of Congress approved July 26, 1866, chapter CCLXII, which declares that "the mineral lands of the public domain, both surveyed and unsurveyed," are "to be free and open to exploration and occupation by all citizens of the United States, and those declaring their intention to become citizens, subject to such regulations as may be prescribed by law," and "subject also to the local customs or rules of miners in the several mining districts, so far as the same may not be in conflict with the laws of the United States."

In the second section it stipulates "that whenever any person or association of persons claim a vein or lode of quartz, or other rock in place, bearing gold, silver, cinnabar or copper, having previously occupied and improved the same according to the local custom or rules of miners in the district where the same is situated, and having expended in actual labor and improvements not less than \$1,000," such claimants, where there is no conflict, after filing in "the local land office a diagram of the same," according to local laws, customs, and miners' rules, can "enter such tract and receive a patent therefor, granting such mine, together with the right to follow such vein or lode with its dips, angles, and variations to any depth;" the other sections of that law prescribe with speciality the mode of consummating individual rights; also in reference to conflicts; in regard to the right of way; to the priority "of possession;" of rights to the use of water for mining, agriculture, manufacturing, or other purposes; to

homesteads existing prior to the date of the act, which are used for agriculture, on which valuable mines are not discovered, the law conferring authority on the Secretary of the Interior for setting apart, after survey, the agricultural lands so as to subject them to pre-emption and sale.

Such is a brief outline of the principles asserted in legislation at different times respecting the minerals in the public domain, in regard to which it will be seen that, by recent legislation, important duties are devolved both upon the local officers and the department.

LANDS, SWAMP AND INUNDATED.

Legislation, in this respect, had its origin in the purpose of providing a land fund wherewith to enable the beneficiaries, as grantees of the United States, to construct levees for checking devastating floods like those which break over the banks of the Mississippi, submerging the regions of the St. Francis and Arkansas. The grant further contemplated the making of drains in swampy places, so that all such lands might not only be reclaimed and laid open to cultivation, but be relieved from pestilential malarial.

The original act of 1849 was restricted to Louisiana. The act of 1850 extended to all the States having lands of this character, and the act of 1860 added to the number of grantees.

The interests claimed under these grants have grown to immense proportions, the aggregate selected to 30th June, 1866, amounting to fifty-eight million six hundred and forty-nine thousand two hundred and seventeen acres, of which forty-three million two hundred and four thousand seven hundred and seventy-four acres have been actually patented and titles vested.

In the disposal, under general laws, of the public lands, numerous individual sales and locations were made falling upon tracts claimed as swamp, thereby creating conflicts and controversies. Congress thereupon intervened the act of March 2, 1855, confirming individual titles, and allowing to the States indemnity in cash where cash was paid to the United States, and in other lands where the premises disposed of were taken by bounty land or other locations. This law was extended by act of March 3, 1857.

The original decision and practice of the General Land Office rejected all selections as the basis of indemnity unless such selections were made and reported prior to the passage of said act of 1857.

The late Attorney-General's opinion of April 29, 1866, overruled that decision, and held that in cases of sales or locations prior to the act of March 3, 1857, the right to swamp indemnity exists, even though the selections were made and reported subsequent to that statute.

The aggregate indemnity granted up to the 30th of June, 1866, was, in cash, \$597,201 37, and in lands, 478,086.93 acres.

The act of March 12, 1860, extending the grant of 1850 to Oregon and Minnesota, only allows selections to be made from lands undisposed of, excluding indemnity, and, in regard to surveys made thereafter, fixes a period of two years within which selections must be made, that period to date from the session of the legislature next ensuing official notice of the completion of surveys.

It is suggested that the time for making selections of lands hereafter to

be surveyed shall be limited to two years from the reception of the official plat at the district office, and, in consideration of the indefinite character of the grant, and the various views held by different functionaries in the administration of it, supplemental legislation is recommended, so as to define the purpose of Congress in the matter as to make certain the pathway of the Executive in executing the laws, and at the same time ordering formalities to be observed, after notice, in establishing these interests similar to those provided in the adjustment of pre-emption claims.

The provisions of the act of Congress approved July 23, 1866, "to quiet land titles in California," have been carefully examined, and instructions communicated to the surveyor general and registers and receivers in that State, in order to give full and summary effect to its provisions respecting swamp and other interests.

TIMBER ON THE PUBLIC LANDS.

Its protection is an incident to the land administration. In 1817 Congress passed the first act for the preservation of live oak and red cedar for naval purposes, with penalties for cutting and destroying trees.

The Attorney General in 1821 decided—referring to 3rd Wheaton, page 181—that, independent of positive legislation, the United States had the same civil rights and remedies as individuals for protection of property, real or personal.

In 1881 another act was passed, extending the interdict against spoliation.

The Supreme Court of the United States—case, *United States versus Briggs*, 9 Howard, page 351—construed this statute as authorizing the protection of all timber on public lands, and punishment for trespass.

In 1845 the Attorney General considered it the pre-emptor's privilege to destroy and use any trees on the tract claimed as might be necessary, in order to clear and enclose with a view to cultivation and the making of a home.

In 1855 the management of the timber interest was transferred to the General Land Office, which has employed the registers and receivers, without additional compensation, to prevent the mischief.

The means thus used have been generally successful, not only without cost, but with profit to the treasury.

Where trespass has been committed by timber dealers, stumpage is exacted, or the timber seized, sold, and the proceeds paid into the treasury.

Where there has been trespass through ignorance, and with no purpose of spoliation, the actual entry of the land is required with payment of costs; but in all cases, pre-emptors and parties entering under the homestead are protected and secured in the privilege of using trees on the land claimed, for clearing, fencing, cultivation, the construction of a house to live in; also for ordinary domestic purposes; and if sanctioned by the head of the department, it may be extended, under reasonable limitations, to interests under act of July 26, 1866, which confers the right of mining, where the extension may not be beyond individual necessities, nor amount to waste or spoliation.

IMPORTANCE OF PROMOTING THE PLANTING AND GROWTH OF TREES.

The earliest settlements began in the timber region, and where the felling of the forest was a necessity to make way for the plough.

We have now reached a period when the demand for timber is rapidly on the increase, and the supply diminishing. Settlements, too, are approaching the treeless regions of the plains.

By what agency the western prairies and the country beyond have been denuded, it is useless to speculate. Experience has established the fact that those regions, by protection from fire and proper care, may be covered with a growth equal to the wants of settlers, and may be continually renewed for all time. In fact, it is known in places in Ohio and Illinois that where the land is protected from fire and other causes destructive of culture, there is a spontaneous growth of timber.

The demand, however, as stated, is undoubtedly increasing to an enormous extent, the States which appear to have at present an abundance in higher latitudes being those bordering on Lake Superior and Lake Erie, comprising the northern parts of Michigan, Wisconsin, and Minnesota; yet even there the supply is so diminishing as to be a matter of serious concern.

Projects have been suggested for planting and rearing forests; and yet, while all descriptions of timber are becoming scarce in settled communities, and more expensive, it is nevertheless the conviction that the evil may be lessened by proper effort in all the States east of the great plains, and even in those plains the grand forests of the Cascade region will furnish supplies, until the science of arboriculture may clothe such treeless localities as are not appropriated to cereal cultivation.

A modern writer of eminence ventures the assertion that, with proper care and protection, even inarable territory and sandy deserts, as in Arabia and Africa, might in places be covered with forests, the theory not being inconsistent either with experience or the deductions of science. In fact many acres in the Scioto and Miami valleys, in Ohio, are to-day covered with a thrifty timber growth sufficient for fuel and fencing, which thirty years ago were entirely destitute. It is stated that timber is becoming sufficiently abundant for domestic uses in that State, where the land at the period of first settlements was without trees, and in the ordinary parlance of the times was known as "the barrens;" the process of timber cultivation being now in fact silently going on in the States of the west as well as those in middle latitudes.

The process of fostering this interest might be encouraged and advanced by so amending the homestead law as to require settlers in localities where there is a scarcity of timber to plant on each homestead tract a few hundred trees, as part of a system of cultivation necessary to complete the settler's title, to be shown in proving up the claim at the end of the five years' settlement now exacted by law; and further, by making it obligatory upon United States surveyors to plant midway between each pit and trench the seeds of trees adapted to the climate, the fact of planting and kind of seed to appear in the field-notes of survey, the duty to be enforced under penalty of forfeiture of part of the money agreed to be paid under the surveying contract. In our instructions to surveyors general and deputies this proceeding was recommended, but could not be enforced in the absence of legal stipulations, and has accordingly fallen into disuse.

The system might further be extended by ordering the experiment at military posts and Indian agencies, requiring a number of acres to be enclosed and planted, or at least by stipulations that a limited area at such places shall be so protected as to leave them to the spontaneous action of nature. Facts could in this way be accumulated which might ultimately develop a general system, and lead to advantageous results in connection with this interesting and important subject.

The method of planting and rearing trees is reduced to a science, the peculiarities of localities best adapted to different species having been ascertained. It is known that the pine and fir tribe are generally grown on sandy, shallow surface soil; other trees are natives of swamps; while the oak, hickory, chestnut and others of hardier and more solid growth, exist in natural and better soils suited to their several peculiarities.

Such is the case with wild fruit trees, which have been changed into improved fruit-bearing orchards through the teachings of vegetable anatomy and physiology. The homestead settlers, or other parties upon whom the legislative department may lay its injunctions, can select seed or young growth best adapted to the soil in hand, little labor being required for forest or ornamental trees which naturally grow in wild and uncultivated territory. The variety of soils existing in the public lands affords ample opportunities for encouraging this culture, and, under the requirements of law in the interests contemplated, may lead to valuable results in causing the product of cultivated forest to make good the deficiency created by the rapid advance of settlements and necessary destruction of the forests of the wilderness; also supplying timber wants in treeless territories.

DONATION CLAIMS.

Under the act of Congress, approved September 27, 1850, creating the "office of surveyor general of the public lands in Oregon, and to provide for the survey, and to make donations to settlers of the said public lands," and the several acts supplemental, there were granted to individuals arriving in Oregon and Washington before December 1, 1855, and commencing residence and cultivation prior to date, the quantity of 640, 320, and 160 acres to the several classes respectively mentioned in these laws.

Under these statutes there have been returned to the General Land Office by the registers and receivers in Oregon and Washington for patent 4,524 certificates, covering by estimate 1,637,688 acres, and patents have issued on 3,311 certificates, embracing 1,282,423 $\frac{1}{3}$ acres.

There is a class of donations in Oregon and Washington where settlements were made prior to the extension of the lines of the public surveys, in which claimants under existing legislation may defer indefinitely their applications for survey by failing to come forward and pay for the same.

It is recommended that in all such cases a limitation by law be imposed, say twelve months, within which, if the surveys are not applied for, it shall be the duty of the surveyor general to fix the location according to the regular legal subdivisions.

It is the duty of the General Land Office, in all cases where Indian treaties stipulate that titles shall be given, to issue the patents for reservations, generally with a condition that a sale cannot be made by the re-

serves without the consent of the President or of the Secretary of the Interior; yet in some cases unconditional grants are ordered.

For the year ending June 30, 1866, there have been issued twelve hundred patents, including two hundred and ninety-eight thousand two hundred and fifty-six (298,256) acres of the following:

Sacs and Foxes of the Mississippi, Wyandotta, Stockbridges, Pawnee and half-breeds, Ponca half-breeds, Winnebagoes, Sacs and Foxes of Missouri, Pottawatomies, Kansas Indians, Ottawas, and Chippewas.

The range of our operations heretofore in this branch of the land service has embraced reservations under treaties with the Pottawatomies, Ottawas, Miamies, Wyandotta, Creeks, Chickasaws, Choctaws, Pawnees, Delawares, Sioux, Shawnees, Omahas, Ioways, Ottoes, Kaskaskias, Peorias, Piankeshaws, Weas, and Appalachicolas.

Thousands of patents under treaties with Indians of those tribes have heretofore been issued, and cases are from time to time arising requiring the action of this office in conveying title.

By the seventh section of the second article of the treaty concluded September 30, 1854, with the Chippewas, it is declared "that each head of a family or single person over twenty-one years of age at the present time, of the mixed bloods belonging to the Chippewas of Lake Superior, shall be entitled to eighty acres of land, to be selected by them, under the direction of the President, and which shall be secured to them by patent in the usual form."

The Secretary of the Interior, on the 17th of September last, upon review of the question as to the admissibility on unsurveyed land of certain scrip which had been issued under said treaty, has rendered a decision declaring that, according to the terms of the treaty, selections are to be made under the direction of the President, but the selections cannot be effected until the surveys are made and plats officially returned; that such plats must be the basis of selection, and consequently locations on unsurveyed lands of Chippewa scrip are not legally admissible.

Accordingly, a general circular has been issued to give full effect to that decision.

The United States in the earliest period of our history adopted the principle recognised by the English colonies and Government, of extinguishing by purchase the possessory right of the Indians. That policy was disclosed in the proclamation of October 7, 1763, by the King of Great Britain, which declared that no private person should make any purchase from the Indians of any lands reserved to them within those parts of the colonies where settlement was allowed, but that "if at any time any of the said Indians should be inclined to dispose of the said lands, the same shall be purchased only for the Crown."

Our relations in regard to the Indian possessory privilege are fully declared in the case of *Johnson vs. McIntosh*, 8th Wheaton, in which it is maintained that the United States hold the legal title, with the absolute right to extinguish the Indian claim to occupancy.

The principles thus recognised have obtained to the present date, and under their operation the process of extinguishing the aboriginal title has been pursued so as to meet the demands of advancing settlements, and as the Indian passes away before the onward wave of civilization, it is the province of the surveying department to extend the lines of the public

surveys; and further, when by treaty or otherwise it is found necessary to mark out portions of territory for the concentration of Indian bands or tribes, or otherwise for Indian uses, the 7th section of the act of 8th April, 1864, requires that the "surveys shall be under the direction and control of the General Land Office, and as nearly as may be in conformity to the rules and regulations under which other public lands are surveyed," a power which has been exercised in accordance with the expressed requirements of the Indian Office and under departmental orders.

FOREIGN TITLES.

The United States, in the enlargement of national territory, have assumed obligations under the public law, and by treaties, to recognise all titles which had lawful inception prior to the transfer of sovereignty and soil.

A primary and important duty required the separation of private from the public property. "The people change their sovereign. Their right to property remains unaffected." 9 Peters, page 133.

Therefore Congress have established boards of commissioners, opened the United States Courts for the adjudication of foreign titles, and in numerous cases have awarded confirmation by special legislation.

These titles are in minute parcels in the form of lots, in Spanish towns, in rural claims of inconsiderable extent, rising to grants of over a million of acres, which is the case in the Forbes title in Florida, that grant being larger than the State of Delaware, and nearly twice the size of Rhode Island.

The early routes of conquest and civilization may be traced in the old settlements from the St. Lawrence to the Gulf of Mexico, diverging east and west of the Mississippi.

The titles we have dealt with are French, Spanish, British, and Mexican, depending for validity on the colonial laws of European sovereignties, or of Mexico. In some very few instances they were direct from the Crown, although usually made through the instrumentality of the governors general, intendants, sub-delegates, and military commandants.

The property which it is thus incumbent upon us to protect embraces every species of right, inceptive to complete, including "those rights which lie in contact—those which are executory, as well as those which are executed." 4th Peters, page 511.

There is no one branch of jurisprudence where greater research and extent of legal erudition have been displayed by the judicial tribunals than in the determination of the intricate questions which in this connection have arisen, been discussed and judicially determined.

Upon final confirmation it is necessary to have these titles traced out and fixed, by survey and re-survey, on the earth's surface, according to the peculiarities of the ultramarine or other system of the Government from which they originated, whether in claims of English measure, or according to the perch of Paris, or the Spanish lineal arpen, or the "sitios" of California, ordinarily called leagues, and yet differing from the Spanish league of 7,056 arpens—6,002 $\frac{1}{2}$ $\frac{1}{2}$ acres, in the proportion which that number of acres bears to the "sitio de ganado mayor," the ordinary California ranch, embracing the quantity of 4,438 $\frac{1}{2}$ $\frac{1}{2}$ acres. These foreign titles are necessarily interlocked with the public surveys. The limited

number yet to be passed upon should be brought summarily to final decision as suggested in regard to New Mexico and Arizona, so that the public property everywhere may be cleared of shadowy or groundless titles, and the national obligations met upon the basis of equity.

This has been the policy of our Government, which has hitherto done so in good faith upon the acquisition of new territory, and that, too, in a spirit of enlarged liberality. The confirmations have been followed by surveys in thousands of instances, and by complete patents from the United States in favor of the original grantees or their legal representatives.

These proceedings have generally relieved the public land from such antagonistical claims, thereby enabling the Government to dispose of the soil without hazard of conflict, and hence the assurance in the public mind as to the absolute reliability of United States titles. With such assurance settlers and other purchasers will progressively advance upon the unsold soil, in which the Territories *alone* (yet to be organized into States) comprise a surface large enough to make ninety-seven States, each the size of Maryland, exclusive of the "Indian country," which covers 68,991 square miles, or 44,114,240 acres. Then, too, notwithstanding the past immense disposal by sales and otherwise, there yet remain undisposed of in these Territories, and unsold in the land States, acres enough to accommodate over five hundred and thirty-nine million three hundred and eighty-eight thousand inhabitants, according to the number of persons to a square mile in England and Wales, and that, too, in a country, according to a recent British writer, which is a "boundless mine of wealth," its "resources inexhaustible," with "climate varied and delightful."

Historical and Statistical Table of the United States of North America.

NOTE.—[The whole area of the United States, including water surface of lakes and rivers, is equal to three and a quarter millions square miles.

The thirteen original States.		Area in sq. miles.	Population— 1860.*
New Hampshire.....		9,380	234,076
Massachusetts.....		7,800	1,261,000
Rhode Island.....		1,308	174,000
Connecticut.....		4,760	286,147
New York.....		47,000	2,224,700
New Jersey.....		8,280	678,000
Pennsylvania.....		46,000	2,204,110
Delaware.....		2,180	112,000
Maryland.....		11,194	661,000
Virginia, East and West.....		61,252	1,294,225
North Carolina.....		50,704	944,000
South Carolina.....		34,000	708,700
Georgia.....		58,000	1,007,000

States admitted.	Act organizing Territory.	United States Statutes. vol. page.	Act admitting State.	United States Statutes. vol. page.	Area in sq. miles.	Popu- lation— 1860.*
Kentucky.....	...	...	Feb. 4, 1791	1 189	37,680	1,183,000
Vermont.....	...	...	Feb. 18, 1791	1 191	*16,212	815,000
Tennessee.....	...	...	June 1, 1796	1 491	45,000	1,100,000
Ohio.....	Ord'ce of 1787	...	April 30, 1802	2 173	36,964	2,230,000
Louisiana.....	Mar. 3, 1806	2 331	April 2, 1812	2 701	*41,346	708,000

* The total population of the United States in 1860 may be set down, in round numbers, at thirty-one and a half millions. In 1865 it is estimated that the population was thirty-five and a half millions, including the inhabitants of the Territories, estimated at 250,000 persons on January 1, 1865. In 1870, according to existing ratios, the population of this country will be over forty-two and a quarter millions.

† The areas of those States marked with a star are derived from geographical authorities, the public surveys not having been completely extended over them.

States admitted.	Act organizing Territory.	United States Statutes. vol. page.	Act admitting State.	United States Statutes. vol. page.	†Area in sq. miles.	Population 1860.*
Indiana.....	May 7, 1800	2 58	Dec. 11, 1816	3 359	33,909	1,350,428
Mississippi.....	April 7, 1798	1 549	Dec. 10, 1817	3 473	47,156	791,305
Illinois.....	Feb. 3, 1809	2 514	Dec. 3, 1818	3 536	*55,410	1 711,951
Alabama.....	Mar. 3, 1817	3 371	Dec. 14, 1819	3 608	50,723	964,201
Maine.....	.....	.....	Mar. 3, 1820	3 544	*35,000	638,279
Missouri.....	June 4, 1812	2 743	Mar. 3, 1821	3 645	*65,350	1,182,012
Arkansas.....	Mar. 3, 1819	3 498	June 15, 1836	5 50	52,198	435,450
Michigan.....	Jan. 11, 1805	2 309	Jan. 26, 1837	5 144	*56,451	749,113
Florida.....	Mar. 30, 1823	3 654	Mar. 3, 1845	5 743	59,368	140,425
Iowa.....	June 12, 1838	5 385	Do.	5 749	55,045	674,948
Texas.....	.....	.....	Dec. 29, 1845	9 108	*174,356	604,215
Wisconsin.....	April 20, 1836	5 10	Mar. 3, 1847	9 173	53,924	775,381
California.....	.....	.....	Sept. 9, 1850	9 452	*188,981	805,439
Minnesota.....	Mar. 3, 1849	9 408	Feb. 26, 1857	11 165	32,531	173,855
Oregon.....	Aug. 14, 1843	9 323	Feb. 14, 1859	11 333	95,274	52,465
Kansas.....	May 30, 1854	10 377	Jan. 29, 1861	12 125	81,318	107,266
West Virginia.....	.....	.....	Dec. 31, 1863	13 633	22,000	.....
Nevada.....	Mar. 3, 1861	12 300	Mar. 21, 1864	13 30	*31,539	38,857
Colorado.....	Feb. 28, 1861	13 173	.....	13 33	*104,500	110,507
Nebraska.....	May 30, 1864	10 377	.....	13 47	75,735	34,277
						12,261
						23,541

Territories.	Acts organizing Territories.	United States Statutes. vol. page.	Area in square miles.	Population.*
New Mexico.....	Sept. 9, 1850	9 446	121,201	The estimated population of these Territories on January 1, 1865, as above indicated, was 360,000.
Utah.....	Do.	9 453	*108,383	
Washington.....	March 2, 1853	10 173	69,994	
Dakota.....	March 2, 1861	12 339	240,597	
Arizona.....	Feb. 24, 1863	12 664	**126,141	
Idaho.....	March 3, 1863	12 308	90,932	
Montana.....	May 26, 1864	13 85	143,776	
Indian Territory.....	68,991	
District of Columbia.....	July 16, 1790	1 180	10 miles sq.	
	March 3, 1791	1 214		

* The total population of the United States in 1860 may be set down, in round numbers, at thirty-one and a half millions. In 1865 it is estimated that the population was thirty-five and a half millions, including the inhabitants of the Territories, estimated at 360,000 persons on January 1, 1865. In 1870, according to existing ratios, the population of this country will be over forty-two and a quarter millions.

† The areas of those States marked with a star are derived from geographical authorities, the public surveys not having been completely extended over them.

‡ The present area of Nevada is 81,539 square miles. Should the portion of Utah be detached and also that of Arizona, as above suggested, there will be added 50,550 square miles, thereby making the area of Nevada 112,087 square miles.

§ White persons.

¶ Indians.

¶ The present area of Utah is 108,383 square miles. By act of Congress of May 5, 1866, this area is liable to be lessened by detaching a portion on the west side of Utah to the extent of one degree of longitude, equal to 18,335 square miles, to be added to Nevada, on the latter consenting by act of Legislature. Should such act be passed, the area of Utah will be 89,037 square miles.

** By said act of May 5, 1866, Arizona, which now contains 126,141 square miles, is proposed to be reduced, by detaching from the northwestern part a tract equal to 12,225 square miles, to be added to Nevada, the Legislature of that State consenting. The effect, in that event, will be to reduce the area of Arizona to 113,916 square miles.

NEVADA.—Enabling act approved March 21, 1864; Statutes, volume 13, page 30. Duly admitted into the Union. President's proclamation. No. 22, dated October 31, 1864; Statutes volume 13, page 749.

COLORADO.—Enabling act approved March 21, 1864; Statutes, volume 13, page 32. Not yet admitted.

NEBRASKA.—Enabling act approved April 19, 1864; Statutes, volume 13, page 47. Not yet admitted.

That portion of the District of Columbia south of the Potomac river was retroceded to ginia July 9, 1846; Statutes, volume 9, page 35.

Tabular statement showing the number of acres of public lands surveyed in the following land States and Territories up to June 30, 1865, during the last fiscal year, and the total of the public lands surveyed up to June 30, 1866, and also the total area of the public domain remaining unsurveyed within the same.

Land States and Territories.	Number of acres of public lands surveyed up to June 30, 1865.	Number of acres of public lands surveyed during fiscal year ending June 30, 1865, but not included in last year's report.	Number of acres of public lands surveyed within the fiscal year ending June 30, 1866.	Total of the public lands surveyed up to June 30, 1866.	Total area of the public lands remaining unsurveyed, including private claims surveyed and not reported, up to June 30, 1866.	Area of the land States and Territories.	
						In acres.	In square miles.
Wisconsin.....	23,375,333	356,838	779,189	34,511,360	....	34,511,360	53,294
Iowa.....	25,328,800	....	....	25,328,800	....	25,328,800	39,025
Minnesota.....	31,454,803	81,323	509,743	32,045,869	21,413,973	53,459,940	82,521
Kansas.....	14,763,521	221,073	1,178,123	16,171,776	25,971,744	53,043,530	81,223
Nebraska Territory..	13,170,801	390,831	18,561,123	32,075,669	43,636,800	75,996	....
California.....	27,009,317	194,716	477,653	27,680,686	92,367,155	130,947,940	198,231
Nevada*.....	4,461,407	57,809	218,908	738,119	51,456,841	53,194,360	81,529
Oregon.....	5,448,986	279,365	1,955	5,730,186	55,945,174	60,975,860	92,574
Washington Territory	3,323,903	15,699	181,074	3,520,645	41,365,515	44,756,180	68,294
Colorado Territory...	1,197,321	10,421	414,509	1,623,251	65,367,749	66,890,000	104,000
Utah Territory.....	2,425,329	....	....	2,425,329	65,659,341	68,084,480	104,200
Arizona Territory..	....	....	....	....	80,780,340	80,780,340	125,131
New Mexico Territory	2,293,143	....	....	2,293,143	75,375,498	77,568,640	121,223
Dakota Territory.....	1,744,881	....	115,108	1,869,989	153,122,091	153,923,080	240,597
Idaho Territory.....	....	....	....	....	58,196,480	58,196,480	90,992
Montana Territory...	....	....	....	....	92,016,640	92,016,640	142,776
Missouri.....	41,894,000	....	....	41,894,000	41,594,008	63,220	....
Alabama.....	32,463,080	....	....	32,463,080	....	32,463,080	50,726
Mississippi.....	30,179,840	....	....	30,179,840	....	30,179,840	47,126
Louisiana.....	32,461,440	....	....	32,461,440	2,000,000	36,461,440	57,206
Arkansas.....	33,406,730	....	....	33,406,730	....	33,406,730	50,120
Florida.....	36,631,530	....	....	36,631,530	11,300,000	37,931,530	58,206
Ohio.....	25,576,960	....	....	25,576,960	....	25,576,960	39,294
Indiana.....	21,637,760	....	....	21,637,760	....	21,637,760	33,290
Michigan.....	36,123,640	....	....	36,123,640	....	36,123,640	55,421
Illinois.....	35,463,400	....	....	35,463,400	....	35,463,400	54,230
Indian Territory.....	....	....	....	....	44,154,340	44,154,340	66,231
Total.....	468,666,252	1,227,263	4,227,037	474,160,551	991,308,349	1,465,466,800	2,229,125

* The State of Nevada was enlarged by adding one degree of longitude—detached from the west part of Utah—11,728,845 acres; also by the addition of that portion of Arizona lying between the 37th degree of north latitude and Colorado river on the south, and the 37th degree of longitude west, to the eastern boundary of California, amounting to 7,822,936 acres, which will increase the area of Nevada to 71,737,741 acres. This is, however, subject to the approval of the legislature of Nevada, of which this office has not been advised at the date of this report. Per act of May 5, 1866.

† A strip of one degree of longitude being taken from Utah on the west, for the purpose of adding to Nevada, equivalent to 11,728,845 acres, the area of Utah thus diminished will be 56,355,635 acres. Vacated Indian reservations in Utah (71,225 acres) were surveyed during the fiscal year ending June 30, 1866, but as this area forms part of that formerly surveyed as the public lands, and is included in 2,425,329, the area is not repeated.

‡ The area of Arizona being diminished by the cutting off the northwest corner and adding to Nevada, amounting to 7,822,936 acres, its area will be 73,906,804 acres.

Statement exhibiting land concessions by acts of Congress to States and Corporations for railroad and military wagon road purposes from the year 1850, to August 1, 1860.

Date of laws.	Name of road.	—Mile limits—	No. of acres certified un- der the gr'ts up to June 30, 1860.	No. of acres certified for the year end- ing June 30, 1860.	Estimated quantities inaring under the grants.
Sept. 20, 1850	Illinois Central.....	6 and 15.....	2,595,053	00	2,595,053
.....do.....	Mobile and Chicago.....	6 and 15.....			
State of Mississippi.*					
Sept. 20, 1850	Mobile and Ohio River.....	6 and 15.....	737,180	99	1,004,640
Aug. 11, 1856	Southern railroad.....	6 and 15.....	171,550	00	404,800
.....do.....	Gulf and Ship Island RR.....	6 and 15.....			653,800
State of Alabama.*					
Sept. 20, 1850	Mobile and Ohio River.....	6 and 15.....	419,538	44	230,400
May 17, 1856	Alabama and Florida.....	6 and 15.....	394,533	99	419,530
.....do.....	Alabama and Tennessee.....	6 and 15.....	440,700	16	481,920
June 3, 1856	N'theastern & S'thwestern.....	6 and 15.....	969,536	58	691,840
.....do.....	Cocosa and Tennessee.....	6 and 15.....	67,784	96	133,480
.....do.....	Will's Valley.....	6 and 15.....	171,930	51	206,080
.....do.....	Mobile and Girard.....	6 and 15.....	504,145	96	840,880
.....do.....	Cocosa and Chattooga.....	6 and 15.....			150,000
.....do.....	Tenn. & Alabama Central.....	6 and 15.....			576,000
Aug. 11, 1856	No map filed.....	6 and 15.....			
State of Florida.*					
May 17, 1856	Florida railroad.....	6 and 15.....	261,984	17	442,543
.....do.....	Alabama and Florida.....	6 and 15.....	165,686	00	165,686
.....do.....	Pensacola and Georgia.....	6 and 15.....	1,275,312	93	1,563,739
.....do.....	Florida, Atlan. & Gulf Cen.....		37,563	29	133,153
State of Louisiana.*					
June 3, 1856	Vicksburg and Shrevep't.....	6 and 15.....	353,211	70	610,380
.....do.....	N.O., Opelousas & G't W'n.....	6 and 15.....	719,193	75	967,840
Aug. 11, 1856	No map filed.....				
State of Arkansas.					
Feb. 9, 1853	Memphis and Little Rock.....	6 and 15.....	197,338	51	423,646
July 23, 1856	Do.....	Addit'l.....	5		965,539
Feb. 9, 1853	Cairo and Fulton.....	6 and 15.....	1,115,408	41	1,100,067
July 23, 1856	Cairo and Fulton.....	Addit'l.....	5		965,739
Feb. 9, 1853	Little Rock and Ft. Smith.....	6 and 15.....	550,590	18	550,525
July 23, 1856	.....do.....	Addit'l.....	5		453,771
State of Missouri.					
June 10, 1853	Hannibal and St. Joseph.....	6 and 15.....	493,331	33	751,944
.....do.....	Pacific and S. west. Branch.....	6 and 15.....	1,158,073	54	1,161,325
Feb. 9, 1853	Cairo and Fulton.....	6 and 15.....	63,540	11	819,263
July 23, 1856	.....do.....	Addit'l.....	5		123,718
July 4, 1856	Iron Mountain (from Pilot Knob to Helena, Ark.).....	10 and 20.....			1,400,000
State of Iowa.					
May 15, 1856	Burlington & Missouri R.....	6 and 15.....	287,046	24	948,643
June 2, 1854	.....do.....	20.....			101,110
May 15, 1856	Mississippi and Missouri.....	6 and 15.....	431,774	36	1,144,904
June 2, 1854	.....do.....	20.....			116,978
May 15, 1856	Cedar Rapids & Mo. River.....	6 and 15.....	775,717	67	1,296,739
June 2, 1854	.....do.....	20.....			123,370
May 15, 1856	{ Dubuque & Sioux City }	6 and 15.....	1,236,163	89	1,236,163
June 2, 1854	{ An'ed change of route fr. Ft. Dodge to Sioux }				
May 12, 1854	McGregor and Western.....	10 and 20.....			1,536,000
.....do.....	Land granted to State for railroad from Sioux City to the south line of the State of Minnesota "at some point between the Big Sioux and West Fork of the Des Moines river.".....	10 and 20.....			256,000

* Grants to Mississippi, Alabama, Florida, and Louisiana, under acts of May 17, June 3, and August 11, 1856, having expired, application will be made to Congress to extend the time for the completion of the railroads in said States.

Date of laws.	Name of road.	Mile limits	No. of acres certified na- der the gr'ts up to June 30, 1865.	No. of acres certified for the y'r end- ing June 30, 1866.	Estimated quantities fouring under the grants.
State of Michigan.					
June 3, 1856	Port Huron and Milwaukee	6 and 15	6,468 68		312,394 38
.....do.....	Detroit and Milwaukee	6 and 15	30,998 75		355,430 19
.....do.....	Amboy, Lansing, and Traverse Bay	6 and 15	719,886 23		1,032,469 19
July 3, 1866	Time extended 7 years..				
June 3, 1856	Flint and Pere Marquette.	6 and 15	511,485 90		588,936 53
.....do.....	Grand Rapids and Indiana	6 and 15	632,123 23		639,123 23
June 7, 1864	.....do.....from Ft. Wayne to Gd. Rapids, &c.)	90			531,366 00
June 3, 1856	Bay d'Noquet & Marquette	6 and 15	218,881 10		218,881 07
March 3, 1865	.....do.....do.....	300 sec's			139,050 00
June 3, 1856	Marquette and Ontonagon	6 and 15	216,919 19		308,315 24
March 2, 1845	.....do.....do.....	90		46,086 45	943,379 00
June 3, 1856	Chicago, St. Paul, & Fond du Lac (branch to On- tonagon)	6 and 15	174,080 41		308,968 59
.....do.....	Chicago, St. Paul, & Fond du Lac (branch to Mar- quette)	6 and 15	162,044 46		186,594 24
July 5, 1863	Peninsula, from Marquette to the mouth of the Me- nomonie river	6 and 15			373,690 00
March 3, 1863	Peninsula railroad	90			183,000 00
State of Wisconsin.					
June 3, 1856	Tomah and Lake Superior (formerly La Crosse and Milwaukee)	6 and 15	334,943 23		694,307 51
May 5, 1864	Tomah and Lake Superior	10 and 30			675,800 00
June 3, 1856	St. Croix & Lake Superior	6 and 15	534,713 15		534,714 05
May 5, 1864	.....do.....do.....	10 and 30			850,000 00
June 3, 1856	Branch to Bayfield	6 and 15	318,740 30		218,737 74
May 5, 1864	.....do.....do.....	10 and 30			215,000 00
June 3, 1856	Chicago and N. western	6 and 15			
April 20, 1863	Change line of route		211,143 03		600,000 00
May 5, 1864	From Portage City, Berlin, Doty's Island, or Fond du Lac, in a northwestern direction to Bayfield and thence to Superior	10 and 30			1,300,000 00
State of Minnesota.					
March 3, 1857	St. Paul and Pacific	6 and 15	466,566 14		664,829 05
March 3, 1865	.....do.....do.....	10 and 30			580,000 00
March 3, 1857	Branch St. Paul & Pacific	6 and 15	438,075 33		750,000 00
March 3, 1865	.....do.....do.....	10 and 30			735,000 00
July 12, 1862	Author'd change of route				
March 3, 1857	Minnesota Central	6 and 15	174,074 81		353,403 09
March 3, 1865	.....do.....do.....	10 and 30			230,000 00
March 3, 1857	Winona and St. Peter	6 and 15	223,163 75		730,004 00
March 3, 1865	.....do.....do.....	10 and 30			660,000 00
March 3, 1857	Minnesota Valley	6 and 15	269,708 74		560,000 00
May 12, 1864	.....do.....do.....	10 and 30			160,000 00
May 5, 1864	L. Superior & Mississippi				
July 15, 1866	Authorized to make up deficiency within thirty miles of the west line of said road	10 and 30			800,000 00
July 4, 1866	From Houston, through the counties of Fillmore, Mower, Freebome, and Faribault, to the western boundary of the state	5 and 30			735,000 00
.....do.....	From Hastings, through the counties of Dakota, Scott, Cower, and Mc- Leod, to the western boundary of the state	5 and 30			550,000 00
State of Kansas.					
March 3, 1863	Provides for two roads and two branches (no map filed)	10 and 30			2,000,000 00
July 22, 1866	St. Joseph and Denver City	10 and 30			1,700,000 00
July 25, 1866	Kansas and Neosho Valley	10 and 30			2,350,000 00

Date of laws.	Name of road.	Mile limits	No. of acres certified un- der the grant to June 30, 1866.	No. of acres certified for the year end- ing June 30, 1866.	Estimated quantities in grain under the grants.
State of California.					
July 25, 1866	California and Oregon.....	10 and 20.....			3,300,000 00
July 12, 1866	Placerville and Sacramento Valley.....	10			200,000 00
INCORPORATIONS.					
July 1, 1863	Union Pacific railroad, with branch from Oma- ha, Nebraska, from Missouri river to Pac- ific ocean.....	10		45,510 54	25,000,000 00
July 2, 1864	Central Pacific to eastern boundary of California, thence to meet Union Pacific; act 1864, p. 363	..... 20			
.....do.....	Northern Pacific railroad (from Superior to Puget Sound).....	20 and 40.....			47,000,000 00
May 7, 1866	Extends the time for commencing and com- pleting said road 2 yrs.				
July 27, 1866	Atlantic and Pacific, from Springfield, Missouri, to the Pacific.....	.....10 and 20.....			17,000,000 00
WAGON ROADS.					
March 2, 1863	From Fort Wilkins, Cop- per Harbor, Michigan, to Fort Howard, Green Bay, Wisconsin.....	8 and 15.....			250,000 00
March 2, 1863	From Fort Wilkins, Cop- per Harbor, Michigan, to Fort Howard, Green Bay, Wisconsin.....	8 and 15.....			221,018 27
June 20, 1864	From Saginaw City, Mi- chigan, by the shortest and most feasible route to the straits of Macki- naw.....	8			1,497,600 00
.....do.....	From Grand Rapids, through Newaygo, Tra- verse City, and Little Traverse, to straits of Mackinaw.....				
July 2, 1864	From Eugene City, by way of Middle Fork of Willa- mette river, and the most feasible pass in the Cas- cade range of mountains, near Diamond Peak, to the eastern boundary of the state.....	8			768,000 00
July 4, 1866	From Corvallis to the Ac- quinna Bay.....	8			76,800 60
July 5, 1866	From Albany, by way of Canyon City, and the most feasible pass in the Cascade range, to the eastern boundary of the state.....	8			460,000 00

RECAPITULATION.

States.	Estimated number of acres granted for wagon roads.	Number of acres certified under the grants.	Estimated number of acres granted.
Illinois.....	2,595,053.00	2,595,053.00	2,595,053.00
Mississippi.....	903,680.39	903,680.39	2,032,340.00
Alabama.....	2,383,136.50	2,383,136.50	2,729,130.00
Florida.....	1,760,466.30	1,760,466.30	2,890,114.00
Louisiana.....	1,072,406.45	1,072,406.45	1,573,730.00
Arkansas.....	1,793,167.10	1,793,167.10	2,940,371.00
Missouri.....	1,515,426.00	1,515,426.00	2,745,160.21
Iowa.....	2,770,708.96	2,770,708.96	6,751,307.96
Michigan.....	2,718,413.49	2,718,413.49	5,327,938.96
Wisconsin.....	1,879,545.35	1,879,545.35	5,373,360.30
Minnesota.....	1,580,808.82	1,580,808.82	7,798,403.68
Kansas.....	.....	.....	6,550,000.00
California.....	.....	.....	2,409,280.00
Corporations—Pacific railroads.....	30,682,617.65	30,682,617.65	55,301,581.40
Wagon roads—Wisconsin.....	260,000.00	45,510.54	92,300,000.00
Michigan.....	1,718,613.37	.....	.....
Oregon.....	1,305,600.00	.....	2,374,312.37
	3,274,313.37	30,728,128.19	157,835,794.67

GENERAL LAND OFFICE, September 4, 1866.

No. 14.—Statement exhibiting land concessions by acts of Congress to States for canal purposes from the year 1827 to August 1, 1866.

States.	Date of laws.	Statutes.	Page.	Name of canal.	Total no. of acres granted.
Indiana.....	Mar. 2, 1837	4	236	Wabash and Erie canal.....	1,439,379
	Feb. 27, 1841	5	414		
	Mar. 2, 1845	5	731		
Ohio.....	Mar. 2, 1837	4	236	Wabash and Erie canal.....	226,935
	June 30, 1834	4	716		
	May 24, 1833	4	305		
(5th sec.) May 24, 1836	4	306	306	Miami and Dayton canal.....	222,935
Illinois.....	Mar. 2, 1837	4	234	General canal purposes.....	500,000
				Canal "to connect the waters of the Illinois river with those of Lake Michigan".....	320,215
Wisconsin.....	June 18, 1838	5	245	Milwaukee and Rock river canal.....	125,431
	April 10, 1866	.....	.....	Breakwater, harbor, and ship canal...	300,000
Michigan.....	Aug. 26, 1853	10	85	St. Mary's ship canal.....	750,000
	Mar. 3, 1865	13	519	Portage Lake and Lake Superior ship canal.....	200,000
	July 3, 1866	Printed laws, a. 93.	.....	do.....do.....do.....	200,000
	July 3, 1866	Printed laws, a. 91	.....	Ship canal to connect the waters of Lake Superior with the lake known as Lac La Belle.....	100,000

RECAPITULATION.

	Total quantity granted.
Indiana.....	1,439,379
Ohio.....	1,100,361
Illinois.....	290,915
Wisconsin.....	325,431
Michigan.....	1,350,000
Total.....	4,405,986

THE THREE PER CENT. LEGAL TENDER CERTIFICATES.

In obedience to the law of 2d March last directing the issue of these securities to the amount of 50 millions for the redeeming of compound notes, Mr. McCulloch has published the requisite notice, and is now giving out the certificates in exchange for the October and December compounds, the aggregate of which will probably absorb the whole issue. It is very much to be regretted that the Secretary did not earlier announce this intention; for, perhaps, he might have diminished the shock which the money market suffered from the sudden locking up of 13 millions of greenbacks at a critical moment, in the New York Sub-Treasury! Nothing can more impressively illustrate the varying sensitiveness of the money market than the events of the past few days. The withdrawal of greenbacks and compounds during the month of August was heavy, but it failed to make the slightest ripple on the stagnant surface of the money market. A month later Mr. McCulloch acted as if he thought he could still with the same impunity withdraw greenbacks from the circulation. He ventured to lock up a few millions, but no one knows how many millions because the Treasury balance published daily puts together in one aggregate with the greenbacks on hand, national bank notes, compounds and even gold certificates, as well as redeemed Seven-Thirties. It is enough to know that large amounts of greenbacks were daily taken out of the circulation and stored away in the government vaults. In nine days the withdrawal was arrested, and the reverse process began, and seems to have continued with little interruption ever since. But it was too late. It was a critical time. The money market had received the shock, and the mischief was done. The Treasury balance has since been depleted from 133 millions to 107 millions, but to little purpose, so far as the movements of the loan market are concerned. For yesterday money was extremely active, and indeed by some persons was declared to be more stringent than at any previous time since the flurry set in.

The truth probably is that the worst of the pinch was over several days ago in the money market itself, but the resulting effects at the Stock Exchange are only partially developed. These effects are various. At first there was a general fall in the more mercurial securities, government bonds standing firm. The next phase was a reactionary rise in the former, while the latter fell, and are still falling, to the great injury of holders of Five-Twenties and other bonds throughout the country. Do we then suppose that the fall in Governments is due solely to the monetary pinch? By no means. There are other well-known causes at work, and the speculators are very busily exaggerating them. But those causes, we think, would not have had the depressing power they have—they would perhaps have had no such power at all—had not public confidence received that unhappy previous shock through the money market, which we regard as the chief bringer-on of the existing depression.

It has been rumored about that some of the speculative advisers who were most anxious that Mr. McCulloch should tighten the money market

towards the close of September, set before themselves as the end of their scheme a fall and a subsequent rise in gold. If this were so the object has been accomplished. Gold has been down to 142½, but has risen again above 145. These persons are also credited with the desire to put down railroad and government securities. Here also they have not failed. Railroad shares, before they "touched bottom" and rallied again, suffered some 6 or 8 per cent. depreciation, and government bonds, though previously so low in comparison of their intrinsic worth, are down 3 per cent., and appear to be going lower.

This fall in securities has, no doubt, given an impulse to speculation, has attracted money into the pockets of the money lenders, and has ripened a rich harvest for operators in stocks and in gold. But what real solid good has it conferred upon the country? Or, rather, who can measure the evil which so sharp a monetary spasm may not have done? We repeat now, as we said last week, that there is an entire absence of evidence that Mr. McCulloch had an idea that any such mischievous consequences were imminent. He had, it must be believed, no design or intention to produce such disasters. But if they have really been induced, and if they are the effects flowing directly from the causes specified, then it is of the gravest moment that the truth should be pointed out in so distinct and luminous a way, that a similar error may never be made again by Mr. McCulloch, or by any future Secretary of the Treasury, or by any other official having power to increase or diminish the currency, when the fall drain sets in from the West.

Now, with regard to the certificates. They will bear the uniform date of 15th October, and will be of the denomination of \$5,000 and \$10,000. Almost the only questions, however, which the public care to ask about these securities, are, will they give ease and steadiness to the money market? Will they undo the evil that has been caused? The most conflicting opinions prevail on these points. Almost all parties agree, however, that the certificates will afford temporary relief if they put an end to the feverish suspense and incertitude as to the action of the Treasury, which is at present regarded as the chief disquieting force in operation. Besides this, however, the certificates will doubtless place the banks in an easier position by enlarging the amount of floating paper available for bank reserves. Of the 50 millions of October and December compounds which will be transmuted into certificates, a part only are held by the banks. The rest are in the hands of private individuals, and the aggregate, when exchanged, will pass into the banks and make these institutions more easy in point of reserve than they have been for some time. So confident are some persons of experience that this will be the way in which the certificates will work, that they predict the issue of 50 millions more as a consequence of the efficiency with which they will perform the functions for which they were authorized by Congress.

REFORMS IN THE NATIONAL BANKS.

The closing of the Croton National Bank of this city a few days since, and the troubles in some other institutions of equally small importance in various parts of the country have produced no prejudicial influence whatever outside of a very narrow circle. These events have rather a reassuring than a depressing effect. For they show that the Internal Banking Law is so vigorously administered that the weak members of the sisterhood of banks must be strengthened or they will be removed. Nor is there any prospect that this vigor will be relaxed. On the contrary, some further improvements in the law are demanded for the stability of our financial system, and for the safety of those great public interests with a view to which the banks exist and are endowed with their special privileges. Few real friends of the banks will object to such an improvement, for instance, as we contended for last week in the redemption of the National Bank notes in New York. We are glad to see that the newspapers are beginning to agitate this measure of reform, for which there is so urgent a pressure of public opinion that its enforcement is a mere question of time. Some well-informed men are so sanguine as to affirm that it will be adopted by Congress at the ensuing session. This opinion is ably advocated by the *Washington Intelligencer*, which on the 2d October, made upon the subject the following very pertinent observations:

"The projects before Congress last winter in reference to the modifications of the national Bank system entirely failed, and they will, no doubt, be revived at the coming session. The experience of the last few months has enjoined the necessity of some modification of the system. The recent prostration in the money market, the sudden rise of the rate of interest, and the fall in stocks may be ascribed in a great measure to the want of a uniform mode of reducing the national bank issues. Currency was abundant everywhere in the summer when it was not wanted; but in the fall, when wanted for moving the crops, and other business operations, it became scarce. The Comptroller of the Currency recommended to Congress, as a measure that would meet this and other difficulties appertaining to the present system, a plan for the redemption of national bank issues at some one or more central points. The Committee on Banking and Currency reported a bill for that purpose, which was not acted upon, and, meanwhile the banks in the interior manifested much opposition to it. It is now contended that such provision for redemption New York would give elasticity to the currency, rendering it abundant for all occasions when the activity of business should require it. Now it is abundant for speculation, at a low rate of interest, at seasons when it is not wanted for regular business. The inequitable distribution of the national bank currency is another source of evil and has given rise to much complaint in the South and West. The opposition to the banking system has been manifested in some quarters upon this ground alone, and strong combinations will at some time be made against it, unless the defect be remedied. Several remedies were proposed in the last Congress, but not adopted. An increase of the currency for the purpose of effecting a more equitable distribution was recommended on one hand, and another proposition was made to scale the shares allowed to the North and East and distribute this excess in the South and West."

Those who are opposed to reforms in our banking law urge that it is unsafe to confer so much financial power as the National Bank Act places in the hands of certain officials of the Government. This argument might be valid if no such institutions as our 1,600 National banks

had been organized, and if no such law had ever been passed to collect the banks of the country into one great organized community. But having so organized these banks, the country is bound to make the system under which they act as perfect and as safe as possible. Our banks may object to various requirements of the law. Some may find irksome the searching reports exacted of them as to their condition at the close of every month, every quarter, and every half year. Others may be restless under the obligation to keep on hand 15 or 25 per cent. of legal tenders as reserve. And a third class may find fault with what they call the inquisitorial visits of the official Examiners, who periodically investigate and report to Washington the state of their business as it appears on the face of the bank books.

But these objectors must remember that a bank is not a close corporation. It is a public institution. It plays an important part in the monetary machinery of the country. Its functions are not primarily to make money for its owners, but to fulfil certain high functions with a view to the public, good. That public good requires that our banks should act under the fullest light of publicity. Such is the demand where a bank does a simple banking business of receiving deposits and making discounts or loans. But when, as has been usual in this country, the banks are permitted to issue notes to circulate as money, the need of publicity is infinitely increased. If a bank fails now, its failure interests a vast multitude of persons scattered far and wide through the country. Hence the safeguards and preventions against bad banking need to be all the more efficient and large.

It will be remembered that at the spring session of the Legislature of this State, the objections to National banking were discussed in connection with a proposed "enabling act" to permit our city and State banks to withdraw from the National organization, and to bank under State laws. This law was passed 20th April, 1867, and as it is of some special interest at the present moment, we copy its chief provisions as follows:

SECTION 1. Whenever any banking association, organized and doing business under the act of Congress, shall dissolve its organization as such national banking association, it shall be lawful for a majority of the directors of such dissolved organization, upon the authority in writing of the owners of two-thirds of its capital stock, to execute the certificate of association required by section sixteen, chapter two hundred and sixty, laws of eighteen hundred and thirty-eight of this State.

SEC. 2. Upon the execution and proof, of acknowledgment of such certificate, as required by section sixteen, aforesaid, which certificate shall further declare the authority derived from the stockholders pursuant to the provisions of the first section of this act, and upon filing a copy thereof in the office of the superintendent of the bank department, with proof that the original is duly recorded in the office of the clerk of the county where any office of such banking association shall be located, such association shall be held and regarded as a banking association under and in pursuance of the laws of this State; and there upon all the assets, real and personal, of the said dissolved national banking association, shall immediately, by act of law, and without any conveyance or transfer, be vested in and become the property of such State banking association; and the directors of the dissolved organization at the time such dissolution, shall be the directors of the association created in pursuance hereof, of until the first annual election of directors thereafter.

SEC. 3. Nothing in the banking laws of this State shall be construed as requiring any banking association or individual banker to issue circulating notes.—Laws of 1867. Chap. 475.

In connection with the foregoing law we may remark that there are two or three points which have probably escaped the attention of its projectors. First, it does not appear that any considerable number of our sound influential banks are so dissatisfied with the national system as to be desirous to leave it in a body, and except such a desertion were headed and supported by banks of undoubted position the withdrawal might be so interpreted by the public as to injure the credit of the institution. This loss of credit actually happened as the result of such a movement and of other co-operating circumstances in the case of the Unadilla Bank, and the Farmers and Citizens' Bank of Brooklyn.

Secondly, a bank retiring from the national system loses, of course, its right to issue currency. The country having once shaken off the curse of a multiform state-bank currency can never again allow the extinct system to revive. All further changes which the currency of this country undergoes will rather tend to unification than to multiplicity. Accordingly the law we publish above distinctly recognizes the loss of the currency-issuing powers by converted banks.

Thirdly, the persons who have been so sanguine as to the ease with which they could effect the process of converting a national bank into a State bank will do well to study the provisions of the National Currency Act. They will find from that law that the difficulties of the conversion will be considerable, will probably necessitate the liquidating of the banks altogether, and in any case will occupy a period of several months.

CENSUS OF RHODE ISLAND, 1865.

In the *MERCHANTS' MAGAZINE* for July we gave an analysis of that portion of the census of Rhode Island relating to persons. Our present paper will refer to the industries of the State, viz., its agriculture, fisheries, manufactures, &c. In reading these it must be kept in mind that Rhode Island is the smallest State in the Union as to territory (1,055 square miles); its population in 1865 was only 184,965, but this enumeration makes it the densest portion of the whole country.

For many years Rhode Island has derived its chief importance from its manufacturing interests. Its fisheries and agriculture have flourished in the home markets created by these. Reciprocally acting on each other, every interest of the State has progressed; population has increased; and wealth aggregated beyond precedent. Indeed, Rhode Island, in proportion to its territory and population, is now the richest spot in the New World.

II. AGRICULTURAL CENSUS.

The statistics collected in the tables which follow refer to the 1st day of June, 1865, and the year then ending.

The returns by counties stood at date as follows :

	Bristol.	Kent.	Newport.	Providence.	Wash'ton.	State
Land: plowed.....	2,168	5,542	7,840	12,804	9,939	57,786
" mowing.....	3,563	14,180	14,813	41,806	265,851	101,313
" pasturing.....	4,275	33,451	30,636	49,636	54,460	133,437
" unimproved.....	9,236	39,444	9,533	94,977	54,801	261,000
Total acreage.....	12,292	82,557	53,861	198,813	144,053	492,576
Cash value—farms.....	\$1,607,130	\$2,669,855	\$5,426,087	\$10,931,701	\$3,944,469	\$34,352,322
" stock.....	122,155	815,667	580,853	1,047,151	680,653	2,066,486
" implements....	48,808	90,477	113,736	339,954	194,167	717,137

The following table compares the aggregate returns of the State census, 1865, with the U. S. census of 1860 and 1850 :

	1865.	1860.	1850.
Land—improved.....acres.	391,486	335,128	303,697
" unimproved.....	301,000	188,006	197,431
Total average reported.....	492,576	523,234	503,928
Cash value of farms.....	\$34,352,322	\$19,520,553	\$17,930,908
" of live stock.....	2,066,486	2,042,044	1,533,657
" of tools and implements.....	717,137	595,791	467,321
" of farms, stock, tools, &c.....	\$37,772,867	\$2,179,888	19,100,646
Farms of 3 acres and over.....No.	6,280	5,364	No return.
Farmers.....	10,764	10,895	9,399

A slight examination of these figures will be sufficient to show that the agricultural interests of Rhode Island comprise no unimportant portion of the industrial pursuits of the State. An industry which has \$27,772,857 invested in farms and stock, and which employs 10,764 persons, is certainly not an insignificant showing for a State of little more than 1,000 square miles of territory.

The following is a statement of the live stock owned in the State and of the products thereof, according to the State census returns of 1865 and the federal returns of 1860 :

Stock.	1860.	1865.	Products.	1860.	1865.
Horses.....Number.	7,121	11,133	Milk sold.....gals.	1,397,733	2,221,573
Asses and mules...."	10	71	Butter.....lbs.	1,621,797	67,466
Milch cows....."	19,700	17,518	Cheese....."	181,511	136,130
Working oxen....."	7,857	6,133	Cattle sold or killed.."	\$711,733	\$765,666
Other cattle....."	11,543	8,143	Wool.....lbs.	90,699	114,731
Sheep....."	32,634	40,717	Eggs and poultry.....	\$173,416	311,794
Swine....."	17,473	15,365			
Poultry.....	\$69,643	\$139,167			

The cereal and other food crops for the same two census years aggregate as follows :

	1860.	1865.		1860.	1865.
Wheat.....bush.	1,131	753	Irish potatoes.....bush.	542,909	710,027
Rye....."	23,359	29,161	Sweet potatoes....."	946	191
Indian corn....."	461,427	466,633	Hay.....tons.	82,723	75,094
Oats....."	244,453	175,944	Clover seed.....pounds.	1,221	4,712
Barley....."	40,998	46,500	Other grass seed.....bush.	4,237	2,404
Buckwheat....."	8,573	2,369	Wine.....gals.	507	2,421

Value of orchard products.....	\$53,691	\$143,355
Value of market garden products.....	140,391	241,562

Also, in 1865, tobacco, 33,548 lbs.; honey, 14,834 lbs.; hops, 679 lbs.; flax, 245 lbs.; peat dug, 9,522 cords; manures bought, \$111,219.

The census of 1865 states in detail the principal products of market gardens, viz., onions, 152,603 bushels; carrots, 99,020 bushels; beets, 25,600 bushels; turnips, 202,480 bushels; green peas, 14,077 bushels; string beans, 7,631 bushels; garden seed, \$12,917; strawberries, 66,942 quarts; &c.

The tables of agricultural statistics show the average yield per acre in Rhode Island and Iowa (for 1865) of the crops named below :

	Rhode Island			Aver. per acre in Iowa.
	Acres planted.	Products.	Aver. per acre.	
Hay.....	101,243	75,894 tons.	0.75 ton.	0.84 ton.
Wheat, { Spring.....	53	763 bush.	14.2 bush.	8.6 bush.
{ Winter.....				
Rye.....	2,694	20,161 "	11.1 "	13.5 "
Corn.....	16,518	466,633 "	28.2 "	28.0 "
Oats.....	6,306	175,944 "	27.9 "	27.5 "
Potatoes.....	7,602	710,627 "	93.4 "	67.9 "

The tables of agricultural statistics of the census of Rhode Island in 1865 contain many items which it would be interesting to examine, and the examination of which would be of utility to the interests of agriculture in the State. But the full investigation of the subject would require too much space, and besides, it would be better done by those whose familiarity with the subject renders them better qualified to do it justice. We commend the study of the tables to such practical minds.

III. FISHERIES AND SHORE CENSUS.

The statistics supplied under this heading are a novelty in census returns in this country. Though of great importance in some States no account of them has been obtained by the national census. Their importance in Rhode Island induced the "R. I. Society for the Encouragement of Domestic Industry" to make an attempt in 1860 to obtain some returns relating to them. The results were presented in a report to the Legislature in 1861, and from this we make the following extracts:—

"While the continental shore-line of Rhode Island is only 45 miles, it has 320 miles of shore washed by the ebbing and flowing tides. Five out of the thirty-two towns that compose the State are situated on islands. The bays embraced within the State abound with fish, many kinds of which are fitted for food, while others are only used for the manufacture of fish-oil and for manures. The shores and shoals of these bays and of the extensive salt-ponds near the southern coast abound with shell-fish. Besides this, every ebbing tide leaves on almost every portion of these shores a rich and valuable deposit of sea-weed and drift.

"The annual value of the product of these salt waters has never been ascertained. The committee deemed it worth an attempt to procure it. These products are of great value and importance. They are secured at an outlay of time and labor, very small compared with their value. Many families derive a large part of their support from them. The amount of fish exported for food is very large, while other varieties are exported in larger quantities for manure or to be manufactured into special manures, which are returned to the State under long and learned names, as special fertilizers.

"To ascertain the value and amount of the various products of these salt waters, the committee instituted inquiries. * * * They regret to report that the returns made are not so full, nor, as they believe, so accurate as they desired. Some of the assistant marshals construed the queries to extend only to the quantities taken and sold. Others have almost entirely omitted all returns on the subject. The committee, however, are satisfied that they have commenced the enquiry. They did not expect full and accurate returns, but they have obtained enough to show the great importance of the enquiry and thereby to secure future attention to it."

The plans and purposes of the committee in 1860 were adopted with some modifications and additions in the census of 1865. The results obtained in the latter year, though incomplete, are fuller than the original returns. These statistics must, from the nature of the case, depend to some extent upon estimates. For example, the clamps or clams on the shores are free to all the inhabitants of the State who choose to dig them. Persons come to the shores from all quarters, and often from distances of several miles, and dig as many clams as they choose, to eat or to carry home. Nothing can be exactly known of the quantities thus removed. The only estimates which could be made were from the opinions of the owners of shore farms. Much care and caution were used in obtaining the estimates, and it was the general opinion of the marshals that the quantities stated were less than the truth.

The following statement shows the results of the enquiries in 1865 as compared with those made in 1860:

	1865.	1860.		1865.	1860.
Salt marsh.....acres.	3,531	1,379	Fish caught for food.100 lbs.	24,694	not stated
" hay.....tons.	2,116	1,640	Value of same.....	\$121,094	94,187
" " value.....	\$18,545	12,530	Clams dug.....bush.	31,097	not stated
Sea drift.....cords.	34,146	34,337	Quahogs....."	9,341	"
" " value.....	\$38,063	37,604	Scallops....."	6,653	"
Fish seized for manure and			Oysters....."	72,896	"
oil.....bbls.	154,468	118,611	Lobsters.....lbs.	43,900	"
Value of same.....	\$126,035	27,817	Value of all shell fish.....	\$118,683	\$11,000
Total value of fisheries, &c., as above.....				\$432,413	\$111,000

These statistics, though imperfect, are sufficient to show that the fisheries and shore products in Rhode Island are of considerable importance, and deserve the attention and care of the State. That they might be increased in quantity and value is certain, and in a short time become the basis of industry little if at all inferior to the agricultural interest. The bays and arms of the sea, and the nature of the coast generally, are favorable to the artificial production both of fish and shell-fish.

IV. CENSUS OF MANUFACTURES.

The total value of manufactures for the year ending June 1, 1865, was \$103,106,395, which was equal to \$557 for each inhabitant of the State. The capital invested in manufactures at that date amounted to \$32,646,803, equal to \$176 for each inhabitant.

The following shows the results of the State census of 1865 as compared with those of the United States census taken in 1860:

	U. S. Census.	State Census.	Increase.
Capital invested.....	\$34,978,295	\$32,646,603	\$2,332,692
Value of materials used.....	19,868,515	63,861,553	44,003,037
" of products for year.....	40,711,396	103,106,395	62,395,097
Manufactures.....No	1,191	1,459	268
Hands employed.....	23,490	26,993	3,503

The enormous increase in the value of raw materials used in 1865, and in the total value of the products of the same year, is partly owing more to the great advance in prices than increase in quantity as between 1860 and 1865.

The following table, taken from the alphabetical list of products for 1865, gives certain details in relation to capital, cost, &c.:

	Establishments		Capital invested.	Value of materials.	Value of products.
	No.	Hands.			
Cotton manufactures	149	16,049	\$15,716,900	\$39,574,083	\$55,478,510
Iron "	183	6,363	5,183,965	4,494,397	9,650,563
Woolen "	83	6,595	7,333,100	10,788,567	21,173,151
	407	28,907	28,133,965	54,857,046	86,301,223
All other manufactures	1,053	8,096	6,513,738	9,004,506	16,905,173
Aggregate.....	1,460	26,993	33,646,603	63,861,553	103,106,395

From this table it appears that of the \$32,646,603 invested in manufactures in 1865 no less than \$26,132,865 were invested in the three leading interests; of the sum of \$63,861,553 paid for raw materials, \$54,857,046 were paid by the same, and of the value of products, viz., \$103,106,395; the value of cotton, woolen, and iron goods produced was \$86,301,223. The particulars of these interests in 1860 and 1865 are thus given in the Rhode Island census report for 1865:

	Cotton		Wool		Iron	
	1860.	1865.	1860.	1865.	1860.	1865.
Establishments.....	170	149	59	83	134	183
Hands.....	15,900	16,049	4,239	6,595	3,943	6,363
Capital invested.....	\$11,327,500	\$15,716,900	\$2,176,000	\$5,233,100	\$2,680,200	\$5,183,965
Value of materials.....	6,590,085	29,574,083	4,077,914	10,788,567	1,769,377	4,494,397
" of products.....	15,183,681	55,473,610	6,929,305	21,173,151	4,659,115	9,650,563
Cotton used, lbs.....	41,614,797	26,959,636	3,056,200	1,461,513	.....	.....
Wool used, lbs.....	.....	.....	6,533,600	13,846,323	.....	.....
Cloth made, yards.....	147,653,300	104,865,973	19,343,600	14,635,477	.....	.....

These comparisons show that in cotton manufactures there was an enormous increase between 1860 and 1865 in the value of materials used and also in the value of products, though there was a large decrease in the quantity of both material and product. In the woolen and iron manufactures there was a great increase both in the quantity and value of the materials used and of the goods produced.

The table which follows is given to show the distribution of the total manufacturing interest to the several counties in 1860 and 1865:

Counties.	Estab-lish-ments.	Hands employ'd.	Capital invest'd.	Cost of materials.	Value of products.
Bristol.....	1860 63 1865 69	975 1,300	\$894,650 1,068,960	\$1,621,980 2,379,061	\$2,692,093 3,123,633
Kent.....	1860 73 1865 111	3,779 4,781	2,766,780 3,803,075	1,607,163 6,900,418	3,601,141 10,360,069
Newport.....	1860 65 1865 129	1,394 967	799,100 890,500	548,193 777,430	1,213,635 1,675,519
Providence.....	1860 894 1865 1,088	23,767 27,143	17,061,936 26,031,066	12,658,866 48,156,974	29,321,478 73,533,135
Washington.....	1860 77 1865 113	2,743 2,833	1,925,300 2,370,350	2,363,223 5,648,339	3,992,960 9,510,006
State..	1860 1,191 1865 1,460	23,490 26,993	\$34,978,295 33,646,603	\$19,683,515 63,861,553	\$40,711,396 103,106,395

The following list comprises the greater portion of the products of manufactures in Rhode Island, as reported by the census of 1865 for the year ending on the 1st June of that year:

Ale & lager beer, bbls.	4,250	Cott'n cloth pr'ted, yds	95,814,963	Paper cap tubes, lbs...	22,800
Amortypes, &c.....	57,500	" bleached & dyed		Planes.....	365
Articles of jewelry, gr	50	yards.....	80,867,518	Photographs.....	13,344
Artificial teeth sets	2,310	" yarns & twine, lbs	2,735,950	Picture frames.....	4,870
Assortments of hard-		" warps, yards.....	3,975,000	Printing presses.....	346
ware.....dos.	60	" aboe and corset		Pyroligneous acid, gals.	96,049
Awalings.....	150	lacings, gross.....	800,000	Rifles and muskets.....	81,700
Axes.....	300	Corsets.....	800	Refined iron, tons.....	4,960
Bags.....	80,300	Cnt nails, casks.....	80,000	Rear sights for musk's	60,000
Balmoral skirts.....	80,000	Dresses.....	8,750	Sabers.....	12,980
Barrels and casks.....	85,350	Dyewoods ground, ton	500	Salt, ground, bushels.	10,000
Baskets.....	2,660	Envelops.....	500,000	Screw machines.....	185
Block alphabets, sets	800	Files.....	540,000	Scythes.....	119,000
Blankets.....	159,144	Fire engines.....	8	Sewing machines.....	10,000
Hobbins & spools, grs	433,161	Flax picking, lbs.....	184	Shoddy, lbs.....	134,000
Book clasps.....	196,600	Grain ground, bush.....	634,400	Spermaceti, lbs.....	30,000
Boards.....feet	4,912,742	Gravest's & monum'ts	5,316	Steam boilers.....	187
Boots & shoes, pairs	273,493	Guanos, tons.....	2,535	" engines.....	144
Bricks.....	13,100,000	Haircloth, yards.....	1,371,500	Snaths.....	1,820
Boxes.....	197,500	Hand rakes.....	3,000	Seahes, blinds & d'rs.	8,150
Brushes.....	14,000	Horse rakes.....	300	Shawls.....	43,800
Bonnets.....	13,665	Handles for cutlery gro	150	Sheep skins.....	64,400
Boats and ships.....	361	Harness.....	1,187	Shingles.....	2,630,000
Butt hinges.....dozen	277,598	Hats & Caps.....	6,000	Staves.....	2,320,000
Buttons.....gross.	7,000	Hemp rope, tons.....	11	Soap, lbs.....	6,515,000
Calf skins.....	5,100	Hoop skirts.....	39,750	Soft soap, bbls.....	1,200
Candles, lbs.....	106,000	Hoop skirt braid, lbs.	83,300	Spirits.....	6,000
Candy, lbs.....	118,000	Harness hames, pairs	2,500	Stoves.....	6,720
Cards, cut.....	1,507,780	Horse shoes.....	3,026,000	Sugar, refined, lbs.....	4,984,000
Cartes de visite.....	222,500	Horse shoe nails, lbs.	407,100	Syrup & molasses, bbls	12,740
Cartridges.....	15,000,000	Illuminating gas, c. f.	91,322,000	Short & kindl'g w'd, c	12,000
Chain cable, tons.....	1,000	Iron castings, tons.....	710	Straw hats.....	14,000
Charcoal, bushels.....	580,800	Iron sinks.....	4,000	Toys, sets.....	1,200
Cloaks and mantillas.	4,000	Lacing leather, doz.....	250	" gross.....	4,000
Cigars.....	8,844,970	Leather belting, feet..	263,183	Tobacco pipes, gross..	13
Coal tar, bbls.....	3,222	Leather, sides.....	29,650	Trunks.....	2,600
Coke, bushels.....	321,900	Loom pickers, dozen.....	31,949	Valises and bags.....	22,000
Coal mined, tons.....	11,838	Lumber planed, feet.....	1,080,000	Vests.....	22,000
Coffins.....	2,708	Lime, casks.....	22,487	Wire rod, tons.....	1,000
Coin trimmings, gro	22,200	Linon lines, dozen.....	662	Wood screws, gross.....	2,692,700
Coats.....	14,814	Marble tops & mantl's	1,075	Woolen cloth, yards.....	14,825,000
Carv. knives.....	8,400	Marine engines.....	14	" hoods, dozen.....	15,000
Cotton cloth, yards.	104,686,978	Mattresses.....	1,500	" hose'y, p'rs, ds.....	10,000
" thread, spools, dzl.	568,000	Market hands, sets.....	15,000	Wool carded, lbs.....	1,100
" spooled, sp	730,000	Newspapers printed..	5,410,000	Weav'rs' harn'sea, s'ts	16,750
" rope, lbs.....	960	Nail kegs.....	49,558	" reeds.....	1,000
" lines, doz.....	18,600	Oil, gallons.....	236,976	Wine, gallons.....	1,000
" tapes, yards.....	3,380,400	Pails and buckets.....	1,800	Wash'g & wring'g ma	1,000
" braid, balls, doz	300,000	Pants.....	87,094	Water elevators.....	500
" wicking, lbs.....	185,880	Paper boxes.....	467,711	Worsted braid, &c, yds	2,977,000
" gross.....	150,000	Plows & cultivators...	565	Woolen yarn, lbs.....	1,077,000

The preceding list is by no means complete for all the articles manufactured in the State. In some establishments a great variety of articles is made, and while it is comparatively easy to obtain the total value of the products, it is difficult and sometimes impossible to obtain the exact number or quantity of all the different articles manufactured.

The same remarks are true, and to a still greater extent, in relation to the articles used in the various manufactures. Almost every important substance known in the animal, vegetable, and mineral kingdoms is used, and of some of them the quantities required are very great. From the returns we select only a few of the substances used during the year 1864-65, and the average daily quantity, reckoning 300 working days in the year:

	Year.	Daily.		Year.	Daily.
Cotton.....lbs.	20,434,999	101,850	Tin.....lbs.	164,000	517
Wool....."	13,943,223	44,477	Tobacco....."	189,593	692
Coal.....tons	42,566	149	Tallow....."	752,500	2,508
Iron....."	41,498	183	Potash....."	81,600	272
Steel.....lbs.	684,617	2,115	Rosin....."	1,750	392
Brass....."	257,000	897	Hair....."	84,374	114
Copper....."	66,097	296	Pearl shells....."	12,000	40
Lead....."	1,212,002	4,040	Leather....."	163,540	445

Let us apply the same method of illustration to the products of the manufactures. We have already given the quantities manufactured. The following shows the quantities produced daily of a few of the articles mentioned :

Cotton cloth.....yards	319,558	Horse-shoe nails.....lbs.	1,357
Cotton yarn and twine.....	9,086	Cut nails....."	26,697
Cotton thread.....spools	62,600	Hoop skirts.....number	132
Calicoes printed.....yards	319,383	Shoe and corset lacing.....doz.	32,000
Files.....number	1,900	Butt hinges....."	995
Haircloth.....yards	270	Woolen cloths.....yards	43,750
Rifles and muskets.....	270	Balls of braid....."	8,000
Horse-shoes.....number	10,067	Worsted braid.....yards	82,440
Tape.....yards	7,953	Shawls.....number	145
Wood screws.....gross	12,178	Stockings.....pairs	400
Blankets.....number	530	Woolen yarns.....lbs.	3,492

If we call the working day ten hours the production of cotton cloth in the State was equal to 583 yards per minute, of calico 532 yards per minute, of woolen cloths 81 yards per minute, and of wooden screws 2,922 per minute, during all the working hours of the year. The total production of cotton and woolen cloths was 67,893 miles, and of calicoes 54,440 miles. The total of cotton and woolen cloths and calicoes would circle the globe five times, or be equal to 1,164 yards for every man, woman and child in the State. It would nearly cover a surface 10 miles long by 7 miles wide.

These illustrations will give to some persons a clearer idea of the magnitude of the manufactures of the State than the simple statement of the quantities of the articles made.

It should be remembered that during the year ending June 1, 1865, the amount of products of some of the most important branches of manufacture was much less than it was five years previous. This was especially true in relation to manufactures of cotton. The high prices and difficulty of obtaining the cotton during the war, caused the suspension of several of the mills and reduced largely the quantity of the products. Several other branches of manufacture were also much depressed at the time the census was taken in the summer of 1865.

With relation to the spindles, looms, and other machinery used in the manufacture of textiles in Rhode Island June 1, 1865, we give the following :

Cotton cloth.....	839,695 spindles and 16,548 looms.
Woolen cloth.....	8,566 spindles, 2,756 looms, and 361 sets of machine: y.
Hair-cloth.....	685 looms.
Braid, lacing, &c.....	1,180 braiders.

The number of steam-engines in use in the manufactures of the State, as reported by the census of 1865, was 263, with 726 boilers, and with a total horse-power of 16,093. In addition to these three caloric engines with 11 horse-power were reported in Providence. Only 9 wind-mills were reported, but it is well known that several others were in operation.

In 258 manufacturing establishments water-power was used ; in 828 manufactories labor was the power used, and 104 used hired steam-power.

The following table shows the power used in each county :

County.	Steam			Establishments using		
	Engines.	H.-power.	Boilers.	Water.	Horse.	Manuel.
Bristol.....	15	980	47	1	1	61
Kent.....	19	866	83	19	1	44
Newport.....	23	794	51	4	2	98
Providence.....	89	6,963	283	151	4	130
" City.....	145	5,881	270	1	11	447
Washington.....	19	980	42	23	5	35
Whole State.....	263	16,003	736	266	24	636

In conclusion, we may repeat that the population of the State on June 1, 1865, was 184,965. The ascertained value of the products of the State for the year then ending was as follows :

Value of the products of agriculture.....	\$7,300,000
" " of the fisheries, &c.....	423,477
" " of manufactures.....	108,199,286

Total value of products..... \$111,112,866

This shows a production of \$601 to each inhabitant of the State as per census of 1865.

In Massachusetts, the State census for the same year shows a population of 1,267,239, and the value of all products for the year was \$517,240,613, equal to \$408 *per capita*. In the Massachusetts census there are large sums for whale, cod, and mackerel fisheries, coastwise freights and other items, which are not found reported in the census of Rhode Island. Relatively, the last-named State is the most productive, as it has long been the wealthiest, State of the Union.

THE PUBLIC DEBT.

The statement of the National debt, which we print on another page, offers some very suggestive aggregates. One is the net total, which now stands at 2,495 millions, against 2,492 millions a month ago. Since the debt reached its highest point two years ago, we have become so accustomed to see the aggregate diminish month by month, that some feeling of disappointment is apt to spring up when we find that the process of liquidation has been even temporarily arrested. In the present case the amount of the increase is small, and does not quite reach 2½ millions of dollars. It must be remembered, however, that, in a practical point of view, the present pressure of a National debt upon the resources of the people does not depend so much upon the nominal aggregate of that debt, as upon the amount of the annual interest it calls for, the methods of taxation used to collect the amount, and the sacrifices which these taxes entail by the interruption of the industry of the toiling masses of the population.

If we are rightly informed, there are two causes for last month's increase of the debt—heavy disbursements and diminished revenue. Although the ordinary payments incident to the carrying on of the Government are being reduced by economy and retrenchment at Washington to an extent which the public is not fully aware of, the extraordinary disbursements for the War Department, and especially for the payment of bounties, mount up to a very large sum. And when Congress voted the extra bounties it was pointed out as inevitable that the donations to our soldiers must be made by borrowing, and by a consequent increase

of the public burdens and the public debt. As to the diminished revenue, that is a result of the more equable adjustment of our internal taxation, which in 1865 and 1866 was found so galling and oppressive as to paralyze industry, to fetter the productive powers of the country, and to take out of the pockets of the people much more than it brought into the coffers of the Government. For these reasons, and for others which are waived for the present, we are not surprised to see that the tendency of the public debt is to augment rather than to diminish. But when our crippled industries have had time to gather vigor, when the organization of labor and capital is no longer dislocated in the South, when the productive energies of the whole country are revived and set in full harmonious activity—when, in a word, the giant strength of the nation is recuperated and disenthralled, the pressure of the debt will be infinitely less onerous, less severe, and more manageable.

The second suggestion from the debt is the satisfactory progress of the funding operations, in which the progress has been so steady and successful for two years past. We had been prepared to expect that Mr. McCulloch would have been compelled to relax the activity of these funding movements, and that after the vast efforts lately put forth to get relief for the Treasury from the prodigious aggregate of compounds and other floating short-date securities which mature this Fall, he would have left the Seven-Thirties that mature next summer, and would not be able to make any effective arrangements at present to diminish the amount out-standing. One is gratified, however, to find that no less than thirty-five millions of these Seven-thirties were redeemed and cancelled during the month of September. The aggregate now out is thus reduced to 365 millions, of which some 225 millions mature in June next, and 140 millions in the following month. The aggregate of these two issues was originally 530 millions. Although it is matter for regret that these notes were so issued originally as that such vast amounts of them should mature together, still they are now brought down to such narrow limits as to be easily manageable, and to suggest little ground for anxiety. The discovery on Thursday last of a dangerous and unusually well executed counterfeit of the June Seven-Thirties has caused some consternation among the holders of these securities, and will probably exert no small influence in stimulating the funding of both series into long bonds. Indeed we shall not be surprised if these clever forgeries, together with the frequent losses of bondholders by fire and robbery, by shipwreck and other causes should tend to induce more preference than has heretofore been shown for registered bonds. It is worthy of being generally known to the public that registered bonds may be had from the Treasury without delay. The conversion is facilitated by act of Congress, which permits coupon bonds to be exchanged without expense into registered bonds; and holders for investment throughout the Eastern States are availing themselves of the privilege so rapidly that we shall not be surprised if the greater part of the gold-bearing issues held in this country should before long be transmuted into registered bonds which offer complete safety.

We have only space to notice one more point in the debt statement, namely, the contraction of the greenback currency. In the exercise of

the discretion confided to him by Congress in the act of April, 1865, Mr. McCulloch has seen fit to withdraw currency to the amount of four millions, which is the maximum the law allows. He evidently believed that the relief to the money market which would be caused by the issue of the Three per cent. Certificates would countervail any tightening or stringency which might be caused by the maximum amount of legal contraction. As Mr. McCulloch is an old banker, and on the whole a very discriminating and judicious thinker on practical finance, it is not improbable that he may have calculated aright this time. Indeed the present indications confirm our opinion as expressed last week, that the monetary pinch caused by locking up currency suddenly in the Treasury, and aggravated by popular apprehension or by the machinations of speculators, has completely passed off for the time being. Still the Secretary of the Treasury incurs so much odium in consequence of his being the depository of the power over the currency that it has been proposed as a great relief to him that this control should be deposited in a Board like that which governs the Bank of England, all whose deliberations and doings shall be completely public, and should be known by the press to every one. Whether this project can be carried out or not may, perhaps, be doubted: as, also, whether it would work well, if adopted. But we may be well assured that the duties of the Secretary of the Treasury are quite heavy enough, and multifarious enough, without this additional burden.

THE BREADSTUFFS MARKET.

It was very generally anticipated that one of the early consequences of the abundant harvest throughout the entire country would be a decline in the value of breadstuffs. The high prices of cereals for several months past were attributed to the deficiency of last years crops; and it was naturally concluded that, with our unusually abundant harvest, prices would rule low. That result, however, has not followed. On the contrary, as will be seen from the following comparison, the quotations now are little changed from those current at this time last year, when the deficiency of the crops was generally understood:

	Oct 10, 1867.	Oct. 1, 1866.
Flour, Superfine, @ bbl.....	\$8 65 @ 9 80	\$.....
Shipping R. hoop Ohio.....	10 75 @ 11 40	11 50 @ 12 00
Double Extra Western and St. Louis.....	12 25 @ 16 50	12 50 @ 13 00
Southern, fancy and extra.....	12 00 @ 15 00	12 50 @ 13 00
Wheat, Chicago Spring, per bushel.....	2 30 @ 2 60	1 75 @ 1 80
Milwaukee Club.....	2 80 @ 2 60	2 00 @ 2 25
Red Winter.....	2 65 @ 2 75	2 75 @ 2 80
White.....	2 80 @ 3 10	2 80 @ 3 10
Corn, Western Mixed.....	1 30 @ 1 35	1 25 @ 1 30
Southern White.....	1 40 @ 1 45	1 35 @ 1 40
Rye.....	1 50 @ 1 65	1 15 @ 1 20
Oats, Western cargoes.....	75 @	65 @ 70
Barley	1 40 @ 1 55	1 30 @ 1 35

This apparent anomaly in values is not to be accounted for by any disappointment at the result of our harvest. In some sections complaints are made of the yield falling considerably short of anticipation. But such cases are the rare exceptions, the rule for the whole country

being all that could be expected from an increased average under crops, a fine season for planting and growing, and propitious weather for harvesting. We have the best possible confirmation of this view in the large amounts of grain now pressing towards the markets. Exclusive of corn, the receipts at the grain ports of the West show an enormous increase upon those of last year. The arrivals at the ports of Chicago, Milwaukee, Detroit, Toledo and Cleveland, from August 3 to October 5, compare as follows with those for the same period of 1866 :

	1867.	1866.	Increase.
Flour.....bbls.	1,024,969	106,026	228,903
Wheat.....bush.	12,164,266	7,877,973	4,286,292
Oats.....	5,392,226	1,922,150	3,470,076
Barley.....	1,593,071	703,797	889,274
Rye.....	726,583	461,817	274,766
Total.....	19,776,155	10,455,737	9,320,418
Corn.....	7,701,473	10,544,723	Dec. 2,843,250

The receipts of wheat show an increase of 65 per cent., and of oats, 175 per cent.; while with the total of wheat, oats, barley and rye there is an increase of 90 per cent. In corn there is a falling off of 2,843,250 bushels, or about 37 per cent.

In accounting for the anomaly of such immensely increased receipts being coincident with high prices, it is necessary to keep in view the condition of stocks both here and abroad before the harvest, and the supply of the European grain countries. At the close of the last crop year the stock of breadstuffs in all parts of this country was low, almost beyond precedent. The stock of wheat was so far reduced that a few weeks more consumption would have found us without flour for large masses of population. The early supplies have thus been required for stocking the millers and meeting the immediate wants of consumption, while the surplus receipts have been readily taken for exportation. A similar condition of stocks prevailed in Europe. Taking the average of European countries, it may be affirmed that they have now had deficient harvests for two successive years, and the past summer found them in a condition closely verging upon famine. There, as here, the millers, owing to the high prices of grain, had worked upon the lowest possible stocks, intending to replenish after the harvest; and the consequence has been an unexpectedly large early demand for grain, and a general advance in prices. Were there behind this active fall demand an abundant supply of grain, it would be reasonable to conclude that the present high rates must ultimately yield; but the general tenor of European advices tends to a different estimate of the result of the harvest. It is now generally conceded, with reference to Great Britain, that, although the harvesting weather was moderately propitious, yet the cold, heavy rains during the maturing of the crops did serious injury, so that the yield of wheat may be estimated at 20 per cent. below the average. The imports of wheat into the United Kingdom for the first two weeks of September were 1,521,000 cwts., against only 596,000 cwts. for the same period of last year; which indicates a conviction among grain merchants that the country will require unusually large foreign supplies. Undue importance seems to have been attached to the fact that France has bought somewhat freely in the British markets, the

purchases having been chiefly of red wheat, intended for seeding, and being after all comparatively nominal in quantity. It is very generally conceded, however, that the French crop is as short as that of Great Britain, and that France will have to be an importer of breadstuffs to a considerable extent. In Belgium the crop is short; the harvest of Poland is poor; Spain is deficient, and has begun to import from Marseilles; and in Algeria the crop is so inadequate that urgent assistance will be required from France. On the other side of the account, South Russia is reported to have a fair crop; Turkey, and the countries bordering on the Danube, have a full average; Egypt will have more than its late surplus; Hungary and Banat have overwhelming crops; while, as to the countries on the Baltic seaboard, there is as yet no definite information. It will thus be seen that while many of the grain countries have about an average yield, yet the number deficient far outweighs those having above an average. Taking Europe as a whole, then, it must be concluded that its harvest is short. Still we do not consider the actual foreign yield below that of last year; and yet, taken in connection with the very light stocks at the beginning of the year, the inference is plain, and it appears to us beyond reasonable question that the Old World will require all our surplus to make up its deficiency. This fact, however, does not warrant famine prices. Wheat enough has certainly been raised to supply the world's demand. And yet, since it is our surplus that determines the value of our crop, and as that surplus is needed for meeting the European deficiency, it is not easy to see how the prices of breadstuffs in this country can rule otherwise than high until next harvest. In the event of the yield proving better than is expected in countries from which the advices are not conclusive, or of our own crop proving even more abundant than present estimates, this conclusion may be to some extent modified; but even in that case, it would be too much to expect comparative cheapness in breadstuffs.

COTTON GROWING AND THE COTTON TAX.

Among those best acquainted with the details of cotton growing, it has long been a matter of doubt as to how far we should be able to compete with the growers of other countries under the new condition of affairs inaugurated in the South. The experience of the planters during the last two years has been far from encouraging, notwithstanding the high prices realised upon their product; but as that has been a period of transition, it would be unfair to regard it as fully illustrating what may be expected to obtain permanently under the new order of things.

The recent decline in the price of cotton is forcing this question upon the serious attention of the cotton trade. The current price of the staple at Liverpool is equal to about 20 cents, currency, for low middling, which may be taken as representing the average crop; but out of this 20 cents the planter receives only about two-thirds, or 13½ cents; for there must be deducted 2½ cents tax, and 3½ cents expenses, including loss of weight on account of the damp condition of the cotton; which

brings down the price to 14 cents, without any allowance for the cost of carrying the article from the plantation to the interior towns. According to one of the most trusted authorities in the New York cotton trade, this price is really below what it now costs to grow cotton; and a brief consideration will show the entire credibility of this assertion. Before the war the cost of cotton to the grower was understood to be 6 cents per lb. Now, however, every item of cost is enormously advanced. As a rule, prices average about double those of 1860. This rule applies to draft animals, to agricultural implements, to buildings, to the appliances for transportation and to gins, repairs and labor. The negroes live more expensively than when in a state of slavery, and require comparatively higher wages, while, owing to the high prices of breadstuffs and provisions, it costs much more to feed them than formerly. It may, therefore, be quite safely estimated that for a given amount of labor the planter has to pay fully twice as much as in former times. He is dependent more than formerly upon the factor for advances to cultivate his crop, and, as his greater dependence is attended with increased risk to the lender, his interest charges become a very heavy item of cost, the present rate upon factor's loans being about $2\frac{1}{2}$ per cent. per month. Taking into consideration all these circumstances, it is readily perceived that the cost of growing cotton now is more than double that of years before the war.

Yet, to these items of increased cost must be added the tax of $2\frac{1}{2}$ cents per pound, the climax of the planter's difficulties, placing him, as it does, in a position in which it becomes more than doubtful whether he can continue to compete successfully with the growers of other countries. Whatever may be said of the duty of the South to pay its share of the Federal burthens, it is very clear that the enforcement of this impost must end in sapping that section of its vitality and fatally prostrating its chief industry, and thus depriving the country of one of its principal sources of wealth. When cotton was selling at 35 to 45 cents per pound the duty appeared comparatively harmless; but now that the price is steadily descending to its old level, the question of the tax becomes a matter of life or death to the cotton interest. We can ill afford to allow sectional influences to render us in any degree indifferent to the necessary result of such a policy. The whole country is deeply concerned in maintaining our old ascendancy in the world's cotton trade, for it has not only hitherto been a chief element in our national power, through the foreign demand which always exists for this staple, but the interests of Northern commerce and manufactures are also bound up in the maintenance of this supremacy. If England can supply herself with cotton cheaper than ours, she at once gains an important advantage over our cotton manufacturers. But the really grave fact to be contemplated, in the event of our being outdone in competition as cotton growers, is that the South itself would be comparatively ruined—a mere grain growing country competing with the West—and in that case what becomes of the large Southern demand for Northern manufactures and Western breadstuffs? It is a short-sighted policy which aims to relieve the burthens of the North by the imposition of this tax. Just so far as the tax injures the South does it

injure Northern trade; so that although we may escape the impost, yet we do not escape its effects.

That there is real danger of our losing permanently our former ascendancy in the cotton trade is evident from a comparison of the imports of American cotton and of that of other countries into Great Britain before the war and since. The following figures will illustrate this point:

BEFORE THE WAR (GREAT BRITAIN).

	American.	Other countries.	Total.
1870.....lbs.	498,158,112	170,423,749	668,576,861
1851.....	596,638,983	160,740,797	757,379,780
1852.....	765,680,544	164,151,904	929,732,448
1853.....	858,451,796	236,896,953	1,095,348,749
1854.....	723,151,346	166,181,503	889,332,849
1855.....	681,629,424	210,122,528	891,751,952
1856.....	780,040,016	242,846,296	1,022,886,312
1857.....	654,758,048	214,560,248	869,318,296
1858.....	838,287,776	201,104,400	1,039,392,176
1859.....	961,707,264	264,261,808	1,225,969,072

SINCE THE WAR (GREAT BRITAIN).

1865.....	125,682,490	842,145,806	967,828,296
1866.....	620,057,440	857,072,496	1,377,129,936

AT LIVERPOOL ONLY.

Year ending Aug. 31st.			
1866.....bales	1,260,709	2,308,470	3,569,179
1867.....	1,236,614	1,863,544	3,100,158

For the ten years preceding the war the imports of American cotton amounted to 7,127,500,000 pounds, and of the cotton of other countries to 2,161,000,000 pounds; the proportion of the whole imports consisting of American being 77 per cent., and of all other countries 23 per cent. In 1865, the proportion of American was 14 per cent. and of other countries 86 per cent.; but, owing to the continuance of the war during the first four months of the year, that period must be regarded as exceptional. In 1866, when planting in the South had been resumed, the receipts from the United States were 38 per cent. of the whole, and from other countries 62 per cent. Taking the receipts at Liverpool, for the two last cotton years (ending August 31, 1866 and 1867), we find the proportion in bales has been 37 per cent. of American and 73 per cent. of other countries. These statistics show that we have lost ground immensely, and should be regarded as affording a conclusive reason why the Government should relieve this interest of its burthens.

While we are now raising cotton without profit, India cotton is selling at 7d. per pound at Liverpool, or about 60 per cent. above its value before the war. In other words, the India growers can afford to have the price of their staple reduced 2½d. per pound before they are placed in their former position of competition with the United States. Can we afford a proportionate reduction in the price of our staple? If not, how are we to compete with Eastern cotton? That the planter should be able to pay the tax under such circumstances is clearly impossible.

MOUNT CENIS SUMMIT RAILWAY.

The line of railway which has been in the course of construction for the last eighteen months over this pass, and which follows in the main the great road of the First Napoleon, was successfully traversed on the 21st ultimo over its whole length of 48 miles by a locomotive engine. A train composed of an engine and two carriages left the St. Michel station at 6:30 A. M. There were present the Duke of Vallambrosa; Mr. Fell, the inventor of the system; Mr. Brogden, a director of the company; Mr. Brunles, the engineer, and his assistant, Mr. Bell; Mr. Blake, the agent of the company; Mr. Alexander and Mr. Barnes, locomotive engineers; Signor Copello, chief engineer for the Modane section of the tunnel; Captain Beaumont, R. E., Mr. James Drogden, Mr. Jopling, Mr. Morris and Captain Tyler, R. E., on the part of the British Government.

Mr. Fell's system consists of the application of a central double-headed rail placed on its side in the middle of the way and elevated about fourteen inches above the ordinary rails. There are four horizontal driving wheels on the engine under the control of the engine driver, which can be made by pressure to grasp the central rail so as to utilize the whole power of the engine, and so enable it to work up incredible gradients without slipping. The carriages, also, have four horizontal wheels underneath, which, with the central rail, form a complete safety guard. In addition to the ordinary break there are breaks upon the central rail. It would appear, therefore, impossible for the engine carriages to leave the rail^s where the central one is laid.

The morning was admirably adapted for the trip, the sun shining with great brilliancy upon the Alpine peaks and the numerous glaciers which are visible in the different parts of the route. After leaving the deep valley in which St. Michel is situated, the line passes by a gradient of one in thirty to the Pont de la Denise, where an iron bridge spans the river Arcq near the site of that which was carried away by the inundations of last year. As the little train passed the village of Fourneau, the workmen of the Grand Tunnel of the Alps turned out *en masse*, and, as at all other parts of the route, they were observed stooping down, and even endangering their lives for the purpose of inspecting the unusual mechanism of the engine for working on the central rail. The first very steep gradient of one in twelve was seen in passing Modane, and, foreshortened to the view, appeared on the approach as if impossible to surmount; but the engine, the second constructed on this system, had already proved equal to the task on the experimental line, and, clutching the central rail between its horizontal wheels, it glided quickly up, under a pressure of steam not more than 80 lbs. to the square inch, without apparent effort. The progress was purposely slow, because no engine or carriage had previously passed over the line, and also to give opportunity for examining the works. The damages to the road on which the line was chiefly laid were found to be substantially repaired by the French government. The magnificent scenery around, and the waterfall near Fort Sessailon were much admired, as the sharp curves afforded different views while passing on the edges of the deep ravines. The train entered Lanslebourg station under a triumphal arch, having accomplished 24 miles of distance, and attained an elevation of 2,100 feet above St. Michel.

From this point the zigzags of ascent commence, and the gradients over a distance of four miles were for the most part one to twelve. Looking down from the train near the summit, as if from a balloon, four of the zigzags were visible at the same instant, to a depth of two thousand feet. The power of the engine was satisfactorily tested in this ascent, and the summit was reached under salvos of artillery from an improvised battery, and amid the cheers of French and Italians who had gathered to welcome the English on the frontier. The engine again came to a stand under a triumphal arch, at an elevation of 6,700 feet above the sea. Flags of the three nations, and a silk flag specially presented by Signor Ginaoli to Mr. Fell, waved over a sumptuous breakfast, also provided by that gentleman. The hospice, the lake, and the plateau of the summit, surrounded by snow-clad peaks and glaciers, rising to an elevation of from 10,000 feet to 13,000 feet were passed, and the portion of the descent commenced from the Grand Croix. The railway here follows the old Napoleon road, which was abandoned long since for diligence traffic on account of the dangers from avalanche. Masonry-covered ways of extraordinary strength had here been specially provided for the railway.

The descent to Susa was a series of the sharpest curves and steepest gradients on which the central rail had been continuously laid. The Valley of the Dora, with Susa and the Convent of San Michel, and even the Superga above Turin, visible for thirty miles in the distance, presented a magnificent panorama, as the train wound through a clear atmosphere round the mountain side. The confidence of the party on a trip which would, under ordinary circumstances have been so dangerous, was manifested by their crowding round all parts of the engine, from which, under a feeling of the security afforded by the central rail, they thoroughly enjoyed the ever-changing scenes as they passed round the edges of the various precipices. Susa was entered amid the acclamations of multitudes of spectators, and the party adjourned to dine at the Hotel de France.

Thus was completed a journey unexampled in its character both as respects the steepness of gradients, the elevation of the summit level, and the difficulty with which the curves and precipices were overcome.

GREENVILLE AND COLUMBIA (S. C.) RAILROAD.

The Greenville and Columbia Railroad is constituted as follows :

<i>Main Line</i> —Columbia to Greenville.	miles. 163½
<i>Branch Line</i> —Cokesbury to Abbeville.	11¾
" " Belton to Anderson.	8¾
Total length of road owned by Company.	184½
Blue Ridge R.R. (leased) Anderson to Walhalla.	83
Total length of road operated by Company.	197½

The fiscal is the same as the calendar year. During the early months of 1866 the track was incomplete and remained so until May 31, and it was not until August 31 that the bridge over the Broad River at Alston was restored. In the meantime passengers and goods had been carried on the Broad River between

Columbia and Alston. and from May to August had still to be ferried across the river at the latter point. With exception of the newly laid portions the roadway is reported to be still imperfect and needing extensive repairs.

The rolling stock at the end of 1866 consisted of 16 freight of 7 passenger locomotives; 5 passenger and 8 2d class and mail cars; and 58 freight cars in order and 3 passenger and 2 mail cars, and 21 freight cars which will be rebuilt. The company at the same time were building 8 new cars. The freight stock requires to be largely increased to meet the business offering. During the year passenger trains had been run 60,598 miles, and freight trains 57,840 miles, carrying 31,326 passengers and with its freight, 11,343 bales of cotton.

The gross earnings in the year 1866

Amounted to the sum of	\$351,931 17
Vis.: from freight \$126,811 23, passengers \$112,917 93, government business \$4,859 05, and mails \$7,442 88.	
Occurrent expenses (including \$30,000 extraordinary)	144,730 37
Net income after deducting expenses	\$107,200 80

And there was expended during the year for reconstruction and repairs made necessary by war and freshet \$157,686 34.

The total receipts and disbursements, from January 1 to December 31, 1866, are thus shown in the statement of the auditor, viz. :

RECEIPTS.		DISBURSEMENTS.	
Cash balance, January 1	\$4,294 66	Surveys, right of way, &c.	\$6,010 63
Capital Stock	\$1,580 00	Bills payable	20,195 22
Real Estate	6,000 00	Profit and Loss	21,891 32
Income of road	240,454 21	Blue Ridge RR., old accounts	8,000 00
Bills payable	131,395 45	Interest and Exchange	18,065 98
Cotton account	30,999 79	Bureau Department	7,613 73
Materials, &c., on hand, Jan. 1, '66	21,361 55	Way prior to 1866	33,867 12
Total	\$498,015 66	Way 1866, including extraordinary expenses	155,349 26
		Transportation prior to 1866	22,175 93
		" In 1866	90,467 27
		Materials on hand Dec. 31	14,534 23
		Receipts and cash on hand	26,894 57
		Total	\$498,015 66

The capital account in which is shown the condition of the company at the close of 1866 is as follows :

LIABILITIES.	
Capital stock	\$1,510,874 54
Bonded Debt	1,550,000 00
Bills payable	\$108,847 53
Sundries	230 40
Surplus income	107,167 92
(Coupons and interest due and unpaid \$484,365, not included)	
Total	\$3,205,268 89

PROPERTY AND ASSETS.	
Cost of road	\$2,792,553 37
Locomotives and cars	263,650 26
Real estate, surveys, &c.	25,584 10
Bills receivable	2,617 23
Stocks in other Railroads	80,495 00
Materials, &c., on hand	14,534 23
Receipts and cash on hand	26,894 57
Total	\$3,205,268 89

The bonded debt is thus accounted for :

1st Mortgage bonds due in 1863, '63 & '64.....	\$286,000 00
Bonds guaranteed by State, due July 1881, '83 and '85.....	634,000 00
Plain bonds, due in 10 years from July 1865 and 1866.....	600,000 00
Total outstanding Dec. 31, 1866.....	\$1,550,000 00
Coupons and interest to January 1, 1867.....	484,285 00
Total bonds, coupons and interest.....	\$2,034,285 00

The approximate loss and damage sustained by war and freshet is set down at \$323,205 90, and the loss in assets by the collapse of the Confederate government at \$925,568 02.

DEBT AND FINANCES OF ALBANY.

The indebtedness of the City of Albany is arranged under the three heads of "General Debt," "Water Debt," and "Contingent Debt," the details of each of which, as they stood on the 1st November, 1866, are shown in the following statement :

GENERAL DEBT (principal and interest chargeable on taxation).

Principal payable. On demand	Amounts outstanding			Interest payable		Total Amount.
	5 per ct. \$...	6 per ct. \$3,000	7 per ct. \$1,500	When. On demand	Where. Albany	
1867.....	.....	20,000	.....	Jan. 1 & July 1.	N. York	20,000
1868.....	.....	20,000	.....	"	"	20,000
1869.....	.....	10,000	.....	"	"	10,000
1870.....	\$1,000	.....	.....	June 1 & Dec. 1.	"	21,000
1871.....	20,000	.....	.....	"	"	20,000
1872.....	20,000	.....	.....	"	"	20,000
1873.....	20,000	.....	.....	"	"	20,000
1874.....	19,000	.....	.....	"	"	19,000
1880.....	.....	20,000	.....	"	"	20,000
1881.....	.....	20,000	.....	"	"	20,000
1882.....	.....	20,000	.....	"	"	20,000
1883.....	.....	20,000	.....	"	"	20,000
1884.....	.....	20,000	.....	"	"	20,000
1885.....	.....	10,000	.....	Feb. 1 & Aug. 1.	Boston.	10,000
1886.....	.....	20,000	.....	"	"	20,000
1887.....	.....	20,000	.....	"	"	20,000
1888.....	.....	20,000	.....	"	"	20,000
1889.....	.....	20,000	.....	"	"	20,000
1890.....	.....	20,000	.....	"	"	20,000
1891.....	.....	20,000	.....	"	"	20,000
1892.....	.....	20,000	.....	"	"	20,000
1893.....	.....	20,000	.....	"	"	20,000
1894.....	.....	20,000	.....	"	"	20,000
Total.....	\$100,000	\$243,000	\$1,500			\$444,500

Included in the above are \$100,000 6 per cents, due 1880-84, issued for the relief of families of drafted men, and \$190,000 6 per cents due 1885-94, issued for the purchase of Congress Hall block.

In addition to the foregoing are bonds of the city loaned to the Albany Northern Railroad Company amounting to the sum of \$300,000, 6 per cents, principal payable May 1, 1879, and interest May 1 and November 1, in the city of New York. Including this amount the sum total dependent on taxation for principal and interest is \$744,500.

The sinking fund established for the extinguishment of this debt now holds investments to the amount of \$10,000 (city bonds of 1881 and 1882) bearing 6

per cent. interest. Including a balance in the Chamberlain's hands at the commencement of 1865-66, of \$62,420 82; special tax \$10,000; rent of New York Central Railroad depot (two years), \$12,000, and other income, the total receipts on this account in the year ending November 1st, 1866 was \$89,313 22. The disbursements (redemptions) in the same year, amounted to \$93,750 00 leaving the fund in debt to the amount of \$4,436 88. [On the 1st July, 1867, \$20,000 6 per cents became due, for which provision was made by the Chamberlain]. "Water Debt," principal and interest chargeable to City Water Works revenue :

Principal payable.	Amount outstanding.	Rate.	Interest When.	Where.
1870.....	\$15,000	6	Feb. 1 & Aug. 1.	Albany.
1871.....	45,000	6	" "	" "
1872.....	240,000	6	" "	New York.
1873.....	50,000	6	" "	" "
1876.....	250,000	6	" "	" "
1881.....	250,000	6	" "	" "
Total.....	\$850,000	6	Feb. 1 & Aug. 1.	.....

The sinking fund for the payment of these bonds, as they become due, is made up chiefly from an annual appropriation of \$5,000 by the city and interest on investments. The total income in the year 1865-66, including a balance of \$247 50 from previous year amounted to 13,783 95. From this was purchased water bonds \$10,000, for \$10,109, leaving a balance to credit of \$3,674 95. The investments held by the Trustees of the Fund at the close of the year were as follows :

Water b'ds, 1871.....	\$51,000	City b's, 1873.....	\$4,000	City b's, 1883.....	\$6,000
" 1876.....	24,000	" b's, 1880.....	5,000	1884.....	7,000
" 1881.....	14,000	" 1881.....	1,000	Cash in bank.....	2,675

—total investment \$115,674 95.

"Contingent Debt," principal and interest chargeable to corporations :

Principal payable.	Corporate Title of beneficiaries.	Amount outst'd'g.	Rate.	Interest When.	Where.
1866, July 1....	Alb'ny & W't St'k'b'dge RR.....	\$250,000	6	Jan. 1 & July 1.	Boston.
1870 ".....	" " " ".....	200,000	6	" "	" "
1871 ".....	" " " ".....	200,000	6	" "	" "
1876 ".....	" " " ".....	250,000	6	" "	" "
1896 ".....	Albany & Susquehanna RR.....	500,000	6	" "	" "
Total contingent debt.....		\$1,500,000	6		

The bonds for the construction of the Albany and West Stockbridge Railroad were issued in accordance with agreements made for \$650,000 April 23, 1840, and for \$350,000 June 26, 1841, between the city and the Western (Mass.) Railroad Company, the interest payable by the latter, and for the final extinction of the debt the same company contributes towards a sinking fund (originally of \$100,000) one per cent on the total amount of the loan over and above the interest. The sinking fund thus established amounted, November 30, 1866, to the sum of \$995,841 34, and hence for all practical purposes the city is entirely relieved from the contingency involved in the first issue of the bonds. Included in the sinking fund are \$311,000 of the issue, viz.: of bonds payable in 1866, \$246,000; in 1870, \$38,000; in 1871, \$9,000, and in 1876, \$18,000.

These bonds have since been returned to the city and destroyed, thus reducing the actual outstanding debt to \$689,000.

The Albany and Susquehanna Railroad loan is secured by a mortgage on the property of the company, which besides interest will contribute one per cent. annually to a sinking fund established for the final liquidation of the bonds issued. [The first contribution has been paid, and there can be no doubt of the ability of the beneficiary to meet all future demands as they become due.]

The loan to the Albany Northern Railroad originally belonged to the category of contingent debt, but on account of the bankruptcy and subsequent sale of this company's property, the city has become liable for both principal and interest, and hence its transfer to the general debt list.

The aggregate debt and liabilities of the city, the sum of the above stated indebtedness at the end of the year 1865-66, amounted to \$3,094,500, or less sinking fund, to \$1,972,983 71, as shown in the following recapitulation:

Liability.	Amount of debt.	Sinking Fund.	Debt, less Sink. Fd.
General Fund	\$444,500	\$10,000	\$434,500
Albany Northern Railroad.....	300,000	.....	300,000
Water Works.....	880,000	115,675	764,325
Albany and West Stockbridge Railroad.....	1,000,000	993,841	6,159
Albany and Susquehanna Railroad.....	500,000	.....	500,000
Total	\$3,094,500	\$1,121,516	\$1,972,984

The total of the income account for the fiscal year ending Nov. 1, 1866, is shown in the following exhibit:

Balance of cash on hand Nov. 1, 1865.....	\$88,803 53	\$....
Receipts from Nov. 1, 1865, to Nov. 1, 1866.....	\$61,036 75	
Disbursements		\$78,087 71
Cash on hand Nov. 1, 1866.....		71,751 57
Total.....	\$1,049,839 28	\$1,049,839 28

The principal sources of income were—taxes, \$455,143 11; bonds issued, \$190,000; temporary loan, \$110,000; water works, \$92,729 62; county, \$32,981 52; assessments for streets and drains \$23,481 69; school fund appropriations, \$19,105 96; trustees general debt sinking fund, \$12,900, &c., &c.

Disbursements were made as follows: Temporary loans, \$185,000; Board of Capital Police, \$80,123 61; trustees general debt sinking fund, \$75,750; Congress Hall block (purchase) \$68,858 75; district schools, \$64,296 30; water works, \$35,084 65, and interest on water bonds \$51,000; almshouse, \$47,439 16; streets and drains, \$34,484 50; contingents, \$51,834 09, and street contingents \$22,903 17; fire department, \$46,622 36; lamps, \$44,257 97; poor, \$42,612 05; interest, \$48,398 45; city hall, \$10,256 26; ferry, \$10,796 47; salaries, \$15,725; county, \$16,461 48, &c., &c.

The following table shows the amount raised by tax during the past five years for the several objects therein stated:

	1862.	1863.	1864.	1865.	1866.
Contingents.....	\$84,500 00	\$79,500 00	\$108,000 00	\$168,470 00	\$198,000 00
Lamps.....	23,000 00	23,000 00	23,000 00	35,000 00	40,000 00
Streets.....	3,000 00	3,590 00	6,000 00	50,000 00	5,000 00
Inter-st.....	30,000 00	23,000 00	23,000 00	23,000 00	43,000 00
Sinking Fund.....	10,000 00	10,000 00	10,000 00	10,000 00	10,000 00
City Poor.....	18,000 00	25,000 00	25,000 00	25,000 00	40,000 00
Schools.....	24,000 00	31,000 00	31,700 00	39,580 00	43,770 00
Police.....	40,000 00	40,000 00	40,000 00	45,000 00	70,125 00
County.....	5,114 94	6,313 27	5,513 94	7,960 00	8,460 00
Total	\$345,614 94	\$345,313 27	\$396,213 94	\$433,030 00	\$473,165 11

Thus it appears that five years has nearly duplicated the taxation for city purposes. The increase, however, is much of it of a temporary nature only. The increase of the police tax is, in consequence of the establishment of the Capital Police, an institution on a basis similar to the Metropolitan Police. In other respects the increase has been comparatively moderate, considering the increased price of labor. Probably the city was better lighted in 1866 on \$40,000, than in 1862 on \$22,000, and it is possible that to care for the same number of poor twice as much is now required as five years ago. If rigid economy, however, has been practised in these departments how much more rigidly has that economy been applied to the Department of Schools, the increased cost in the five years having been only about 20 per cent.

The population of Albany in 1860 was 62,367, and in 1865 62,613. It thus appears that the increased taxation has not been relieved by a corresponding increase in population. In 1862-64 it was probably lower than in 1860, and for those years we quote it at 60,000. By the taxing season of 1865 the returning soldiers might have increased the numbers to 62,500. Taking these figures for granted (and the figures by census in 1865 as the numbers on which the tax for 1866 was levied) the taxation, per capita, has been as follows: for 1862 \$4.11; for 1863 \$4.10; for 1864 \$4.77; for 1865 \$6.75, and for 1866 \$7.27. This amount was for city purposes only.

THE STATE OF EUROPE.

The telegraphic synopsis of Count Bismarck's recent speeches indicate conclusively the appreciation by his Government of the situation of the country in its relation to France, and its resolute determination to proceed in its course un-intimidated by the covert menaces of foreign governments, and prepared if need be to defend itself and its policy by force of arms. The dignified reticence of the King of Prussia was not obligatory upon other statesmen of inferior rank though more real influence than the King. Accordingly the Prussian Prime Minister, in the face of the French pretensions that the *status quo* determined by the late treaty is to be the limit of German extension or unification, proclaims to the world from his place in the German Parliament that the complete union of the Teutonic races under one government is still proceeding and will proceed; and while he avows his belief that no power is mean enough, he also boasts that no power is strong enough, to prevent it. There can be no doubt as to the meaning of these words, delivered by a man of Count Bismarck's character, at the head of a great nation flushed with recent successes on a popular path, into which he has led them. The only question that can remain is whether France will take up the practical defiance—a defiance, however, which would not have been one at all had it not been for her ostentatious interference and vain demands for territorial compensation to match the increasing strength of her north-eastern neighbor. It must be hard for so proud a nation to stomach the rebuff—not the less hard because she has provoked it. To do so, moreover, lets her down from

the first place so dear to Frenchmen—that of the first military nation of the Continent; and the descent—thanks to her policy elsewhere—will not remain one of theory alone. The course of events in Italy is closely connected with the relations between Prussia and France. The latter a few years ago assumed the place of patron to the Italian people; but she has, like other patrons, demanded such inconvenient and humiliating deference and sacrifice in return for her favor that the *protégés* has been driven to seek assistance in another quarter. Italy has had to thank Prussia for its last acquisition of Italian territory—Venetia; but yet has not wholly escaped from the tutelage which France has fastened upon her. Whatever the Italian King and Government may do, the nation like Germany desires to complete the consolidation of its race by the comprehension under one Government of all the Italian people. If France has either a national interest which winces at the augmented strength of its late supplier for her assistance, or if she has within herself a religious element with which the Emperor does not choose to break, the Italians see no reason why the programme which the Emperor laid down when he went to war with Austria for Italy should not be completed. Their latest ally is neither jealous of Italian strength nor subject to any religious qualms when the Papal Government is interfered with, and thus they see a means of making the acquisition of Rome, as they did that of Venice, without the sanction, or in spite of the sanction, of the power which resides in Paris. It would be strange if they doubted in the fortune of their star, when they look back at what has been accomplished and feel how much more their fate is in their own hands than it was only seven years ago. Garibaldi, still the popular leader in a project which he has long ago announced and has steadily persevered in promoting, has once again taken the field, and has once again repeated his experience of Aspromonte. He has been stopped on the way to attempt a new conquest for a Government for which he has already conquered kingdoms, and from which he has also already met with opposition, wounds and imprisonment. A life like his is utterly without example in the histories of the world; but the existing phase of it is but a repetition of one that has gone before; and if his projected journey across the Roman frontier has been rendered abortive, so far as direct and immediate results are concerned, it will not in all probability fail to forward the object of the popular desire. Those of us whose business it is to register the progress of events remember how the expedition which was stopped at Aspromonte—how the very stoppage of it indeed forced the hands of the unwilling Government of the day, and made them renew in the face of the world their pledges to the nation, that though policy had compelled them to prevent a premature endeavor to take in the Italian territory which still remained outside of the kingdom of Italy, they had not and would not abandon the intention to claim it. It was five years ago since the Italian House of Commons addressed the King, declaring that they would have an army of four hundred thousand men, and then they would see who would withhold Rome from them; and the circumstances which led to that declaration have been almost re-enacted. But during that short period Italy has become the proprietor of the formidable quadrilateral which had previously barred her entry to the northern Italian province, and Austria, which was one of the strong

men keeping the house against her, has not only suffered ruinous loss, but has been compelled by circumstances to turn her thoughts to a new line of policy, that makes her alike indifferent and powerless in Italy. Victor Emmanuel and his Government have once more obeyed the behests of the Tuileries, at the cost of their own popularity with their own people, but Garibaldi has once more given an impulse to the popular sentiment which in some shape or other, no one can yet tell in what or at what time, will be translated into positive action. Europe is not in so stable a condition as to make it possible for any one power securely to guarantee the sovereignty of a territory like Rome against an adjoining people numbering more than 20,000,000 of the same race as its inhabitants, and animated with a steady purpose of aggression. This could scarcely be done if the Romans themselves were unanimously loyal; it is utterly impossible when a large portion of them, at all events, are only restrained from revolution by the presence of foreign troops. Opinions will of course be divided as to the right or wrong, the good or evil, of the course events are taking; but, humanly speaking, there seems to be little doubt as to the direction in which the Italian question tends for a solution.

GOLD MINING IN VICTORIA.

Few persons, when they read of the immense quantity of the precious metal that has reached England from Victoria, are at the same time aware from how small a portion of the superficies of that colony the golden harvest has been extracted. And yet the six millions sterling that has been shipped from that port for several years has been drawn from a very scurvy slice of the district which is known to be auriferous. Mr. Selwyn, the Government Geologist, asserts that the total area occupied in Victoria by lower Palæozoic auriferous formations, with their associated Plutonic rocks, including the district in which the overlaying tertiaries and recent deposits do not exceed 350 feet, cannot be estimated at less than 41,813 square miles. Deducting 11,465 square miles occupied by granite, and other plutonic rocks, that are not auriferous or only partially so, we have an area of 30,438 square miles, in any part of which there is a possibility of remunerative gold deposits being found, either in veins or in alluvial deposits. Of this superficies only 860½ square miles, or about one thirty-third, have been mined upon; and of the area under treatment only about one-sixth (or in other words about a two-hundredth part of the whole auriferous country) was occupied at the termination of the year 1866. This is no mere guess to serve as an approximation towards the truth, but will be convincingly demonstrated by a reference to to the "Geological Sketch Map of Victoria," that may be seen at the School of Mines, Jermyn street, or at the Port Philip and Colonial Gold Company's office, Bucklebury.

These facts we take from a most interesting pamphlet which has just issued from the press, entitled "The Gold Mines of Victoria, with statistics gathered from the various departments of the Victorian Government, and other sources." The R. L. M. Kitto, Mining Surveyor under the Colonial Government, has ad-

a long experience in mining operations, and is very careful to verify every one of his assertions by reference to suitable authority. The great object of this gentleman is to fix the attention of the English capitalist on the fact that whatever may be the fate of the gold digger, the prospects of the gold winner are improving every day. Unfortunately, he says, it is generally understood in England, and elsewhere, that gold in Victoria occurs in shallow alluviums, and that these are being gradually exhausted. That indeed is the case with the shallow alluviums, but that class of mines, as will be seen by an examination of the map before referred to, bears only a very small proportion to the whole; while it may be affirmed that the immense areas of deep auriferous tertiary, together with the numberless quartz veins, are practically inexhaustible. Mr. Smith, the Secretary of mines for the Colony, in the pamphlet prepared by him in his official capacity, for the present Paris Exhibition, states:—"We have room for four times the number of persons now actually engaged in mining, and if the yield of gold has fallen off, it is because the numbers engaged in mining has decreased. Gold mining is laborious, often uncertain, and frequently involves hardship and suffering which none but the strongest are capable of bearing without injury, and it is not surprising that many persons who left their professions and trades in the hopes that they would soon acquire a fortune on the gold fields, have resumed their former pursuits." This change will, however, turn out greatly to the benefit of the colony, and of those who have the prudence to invest in the auriferous districts, now that their working has passed into this new phase. Alluvial mining was too much a mere lottery for banks, great companies, or investors who required a steady return, to think of taking up. You would get gold or you would get dirt—it was a risk calculated only for small bands of fortune hunters, who, if they lost all, lost little more than their time. The change has begun, and has worked so successfully that interest alone would seal its continuance, even though there were not other causes in operation to keep matters running in the new groove. We fully agree with Mr. Kitto that "in a few years individual mining will be no more known; the quartz mines and deep lodes will become the property of the capitalist, and will be worked with science and skill; the workmen will be better and more regularly paid, and once more the social system will be properly regulated." Quartz mining already furnishes nearly one-half of the yield of gold in the colony. The total sum for 1866 was £5,916,776, of which £4,077,198 was the produce of the alluvial gold, and £1,839,581 came from the quartz.

Those who recollect the history of the Australian gold discoveries will readily account for the fact that the first rush was to the alluvial diggings, and the wealth that emerged from thence was so extraordinary, that succeeding comers may well be excused for having stuck to the tracks left by their predecessors. But science, dogmatizing instead of experimenting, must bear some part of the blame. Prejudiced by the *dicta* of European philosophers, a commission, appointed by the Victorian Government so long ago as 1856, laid it down that mining for gold to great depths in quartz reefs would be unprofitable. They were so precise indeed as to state the limit below the surface—sixty feet or ten fathoms—beyond which it would be hopeless to go. Fact, however, will be

continually giving theory the flat contradiction, and theory then revises its reasoning, strikes out the faulty links, and soon reproduces the chain, sound again, and apparently all the better for having been mended. But in Victoria and California, but for apparently rash explorations, undertaken through ignorance of theory, the geology of gold would still have been based on erroneous principles. The deepest gold mine in the world, and also the most productive, is Mr. Hayward's at Suttar Creek, California, which is 1,200 feet in perpendicular descent from the surface, and probably 300 feet below the ocean. The Port Phillip and Colonial Gold Mining Company received accounts by the very last mail that the profit on their quarts, brought from great depths, amounted to £6,800 for the last month alone.

But this company has carried forward its quartz-crushing operations on a grand scale, and the pertinaciousness with which it adheres to them ought to supply incontestible proof of the remunerative nature of the process. From the commencement of operations in 1857 to the 31st July, last year, the company had crushed a mighty mass, altogether 308,661 tons of stone, obtaining thence gold of the weight of six tons, reckoning 2,000 lbs. to the ton. Mr. Kitto adduces returns also from a very large number of companies, where quartz has been obtained at depths varying from 600 to 260 feet, all presenting excellent profits, and all demonstrating that if the gold does not increase with the depth at least there is no decrease. The grand result of the widest possible investigation is that with the average yield of the colony, viz., 10 dwts. 16·2 grs., or about 43s. per ton, the annual profit of working quartz mines would be 30s. on every ton crushed. Mr. Kitto then gives figures which show that if a return of only 7 dwts. per ton were obtained, there would be a clear profit of 50 per cent. on say every £25,000 employed, even allowing so much out of the returns as £10,900 for contingencies, accident, &c.

The author gives a short digest of the colonial laws and regulations which must in a measure govern the miner's course, for, as well befits a territory in which mining plays so prominent a part, the Government has a Department of Mines, the head of which has a seat in the Legislative Assembly and the Cabinet. The work before us is entirely free from any bias in favor of any particular localities or companies, and very honestly fulfils the purpose it proclaims, that of showing that an immense field is open for the safe investment of capital in the gold mines of Victoria and New South Wales. When capital once more resumes its usual eager activity, instead of being boarded up, cowed, and unfruitful, Mr. Kitto's pamphlet will furnish a guide to investment under the security of British laws, and in a quarter where every shilling set to work will give an impetus to trade at home that must benefit the merchant and the trader through a hundred other channels than that of the dividend on his mining stock that will half-yearly gladden his eyes.

PUBLIC DEBT OF THE UNITED STATES.

Abstract statement, as appears from the books and Treasurer's returns in the Treasury Department, on the 1st September and 1st October, 1867:

DEBT BEARING COIN INTEREST.				
	September 1.	October 1.	Increase.	Decrease.
5 per cent. bonds.....	\$193,431,850 00	\$193,431,850 00	\$.....	\$.....
6 " " '67 & '68.....	14,899,791 80	14,707,941 80	.....	191,850 00
6 " " 1861.....	283,676,100 00	283,676,100 00	.....	.....
6 " " (5-20's).....	1,205,710,500 00	1,225,830,750 00	20,970,250 00	.....
Navy Pen. F'd 6 p.c.....	13,000,000 00	13,000,000 00	.....	.....
Total.....	1,715,637,741 80	1,745,196,141 80	29,508,400 00	.....

DEBT BEARING CURRENCY INTEREST.				
	September 1.	October 1.	Increase.	Decrease.
6 per ct. (RR) bonds.....	\$16,344,000 00	\$16,746,000 00	\$400,000 00	\$.....
3-yrs com. int. n'es.....	78,839,600 00	78,839,680 00	.....	80 00
3-years 7-30 notes.....	400,786,035 00	365,469,100 00	.....	35,316,935 00
Total.....	495,971,635 00	461,074,680 00	.....	34,896,955 00

MATURED DEBT NOT PRESENTED FOR PAYMENT.				
	September 1.	October 1.	Increase.	Decrease.
7-30 n. due Aug. 15, '67.....	\$.....	\$4,250,000 00	\$4,250,000 00	\$.....
6 p. c. comp. int. n'es.....	13,672,730 00	7,438,100 00	.....	6,234,630 00
B'ds of Texas Ind'ty.....	263,000 00	263,000 00	.....	.....
Treasury notes (old).....	163,811 64	164,511 64	.....	700 00
B'ds of Apr. 15, 1849.....	64,768 68	54,061 64	.....	10,707 04
Treas. n's of Ma. 3, '63.....	969,890 00	969,890 00	.....	.....
Temporary loan.....	5,379,185 55	5,012,303 55	.....	366,882 00
Certif. of indebt'ess.....	86,000 00	86,000 00	.....	.....
Total.....	19,440,876 87	18,221,266 68	.....	1,219,610 19

DEBT BEARING NO INTEREST.				
	September 1.	October 1.	Increase.	Decrease.
United States notes.....	\$365,164,944 00	\$361,164,944 00	\$.....	\$4,000,000 00
Fractional currency.....	29,392,179 97	29,394,713 87	2,521 90	.....
Gold cert. of deposit.....	15,463,700 00	14,897,830 00	.....	565,870 00
Total.....	410,019,716 97	405,597,577 87	.....	4,422,139 10

BOAIFIPULATION.				
	September 1.	October 1.	Increase.	Decrease.
Bearing coin interest.....	1,715,637,741 80	1,745,196,141 80	29,508,400 00	\$.....
Bearing cur'y interest.....	495,971,635 00	461,074,680 00	.....	34,896,955 00
Matured debt.....	19,440,876 87	18,221,266 68	.....	1,219,610 19
Bearing no interest.....	410,019,716 97	405,597,577 87	.....	4,422,139 10
Aggregate.....	2,641,119,459 64	2,630,899,456 00	.....	10,720,003 64
Coin & cur. in Treas.....	148,836,094 59	135,112,009 94	.....	13,723,984 65
Debt less coin and cur.....	2,492,783,365 05	2,495,777,446 76	2,494,061 71	.....

The following statement shows the amount of coin and currency separately at the dates in the foregoing table:

COIN AND CURRENCY IN TREASURY.				
	September 1.	October 1.	Increase.	Decrease.
Coin.....	\$101,263,020 00	\$103,293,639 69	\$2,030,639 69	\$.....
Currency.....	47,078,074 59	31,813,349 55	.....	15,264,725 04
Total coin & currency.....	148,341,094 59	135,112,009 94	.....	13,229,084 65

The annual interest payable on the debt as existing September 1, and October 1, 1867, (exclusive of interest on the compound interest notes.) compared as follows:

ANNUAL INTEREST PAYABLE ON PUBLIC DEBT.				
	September 1.	October 1.	Increase.	Decrease.
Coin—5 per cents.....	\$9,921,567 50	\$9,921,567 50	\$.....	\$.....
6 " " '67-68.....	892,187 51	882,476 51	.....	969 00
6 " " 1861.....	17,030,566 00	17,030,566 00	.....	.....
6 " " 5-20's.....	72,342,680 00	74,132,645 00	1,790,215 00	.....
6 " " N. P. F.....	780,000 00	780,000 00	.....	.....
Total coin interest.....	\$100,966,951 01	\$103,737,455 01	\$2,770,504 00	.....
Currency—6 per cents.....	980,780 00	1,004,760 00	24,000 00	.....
7-30 ".....	29,257,379 83	26,630,704 80	.....	2,626,675 03
Total currency interest.....	\$30,238,159 83	\$27,665,464 80	\$.....	\$2,572,695 03
Aggregate coin & currency, excl. comp. interest notes.....	\$131,195,000 83	\$130,411,919 81	\$.....	\$783,081 02

PROGRESS OF GREECE.

A short time ago a pamphlet appeared in Paris entitled "*La Turquie ou la Grece*," by Mr. Alexander Risa Rangabée, at present envoy from Greece to this country. A trustworthy compilation of facts like this which Mr. Rangabée has given us is very welcome here, and we present below some of its leading facts and figures.

The population of Greece is now 1,500,000. In the first decade of Greek independence the increase of population was 3.9 per cent.; in the second, 2.2 per cent.; in the last thirteen years, 1.16 per cent. The average for thirty-four years is 1.44 per cent. That this is not a slow rate of increase is easily shown. When Greece became independent, all the Turks residing within her boundaries emigrated. The greater clemency of the Turkish rule in the Christian provinces of Turkey, after the revolution, also enabled many expatriated Christians to return from Greece to their homes. Lastly, the colonizing spirit of ancient Greece has shown itself in the eagerness with which the Greeks of our day have thrown themselves into commerce. They are found in all quarters of the world.

The agriculture of Greece has advanced wonderfully since freedom has given the agriculturists heart to work. Mr. Rangabée remarks that he is "unable to give a statistical exhibit of the increase in production, but personal observation will soon convince any one that it must be very large. The face of the country in many regions has been entirely changed. Fields of grain cover the sides, and in some places crown the summits of the mountains. The olive and the currant of Corinth replace everywhere the bramble and the thistle." Many of the water courses, which the Turks had allowed to generate swamps, have been brought back into their channels. The best farming implements are coming into use. In Elis, the ground is ploughed by steam-power. The olive, fig and orange plantations give the country along the Gulf of Corinth the appearance of a vast garden. Many millions of trees for new plantations pass every year through the custom-house of Athens.

The Minister of Finance reported, in 1861, that the annual yield of currants before the revolution was 10,000,000 pounds; in 1861 it was 65,000,000 pounds. The number of stremmes—the stremme is a little less than our acre—in vineyards had increased from 25,000 to 700,000; the number planted with fig-trees from 50,000 to 300,000; the number planted with olive trees from 2,300,000 to 7,500,000; and the value of silk production from 650,000 drachmes, in 1840, to 5,430,000 drachmes in 1861. (The drachme is equal to 16½ cents.)

The quantity of land susceptible of cultivation which has thus far failed to receive it, is 11,748,000 stremmes. This fact, however, is not discreditable to the Greeks. The country is able to sustain five times its present population, and nearly thirty thousand families are engaged in the more lucrative pursuits of commerce. The Government supports an agricultural school and model farm and a commission, attached to the Department of the Interior, is constantly busy in the development of this source of national wealth.

Before tilling lands, the Greeks had to build themselves houses. The Turks made thorough work with the homes of rebels. Forty towns have been rebuilt, and more than six hundred villages. Eleven new towns have been founded,

The sum spent on this gigantic reconstruction was not less than two hundred and fifty million drachmes. Mr. Rangabee catalogues the public buildings of Athens, and says it is "a city which unites the natural beauties of the East with the comforts of western civilization."

Greece never possessed good roads, and the Turks left her nothing but pathways. The present Government has constructed nineteen good roads, at a cost, exclusive of labor, of 2,164,724 drachmes. It has also built twenty-two bridges. There are, as yet, no railroads. Telegraph lines connect Athens with Constantinople, and, by way of Trieste, with western Europe.

By the carelessness of the Turks the Greek seaports had become choked up and inaccessible. Under the new rule eight of them have been cleared and deepened. Five new ports have been opened. Four light-houses have been built. The straits of Euripus have been widened and made safe for vessels.

In 1821 the Grecian marine consisted of 421 vessels; in 1865 Greece possessed 1,160 large ships manned by more than 35,000 seamen. A Greek company at Syra has established a line of steamboats. One of these boats, the *Panhellenion*, has become historic. The commercial code of Greece has been framed on the best European models. The Greek navy, ridiculously small for the defence of the country in time of war, has yet cleared the coasts of the pirates which had become under the listless government of the Turks an intolerable nuisance.

In 1862 73,300 vessels entered, and 85,758 vessels cleared from, the ports of Greece. Of the latter number 11,209 were for foreign ports.

In 1851 the imports were valued at 25,819,702 drachmes and the exports at 13,851,202 drachmes. In 1862 the imports were valued at 49,109,666 drachmes and the exports at 32,323,726 drachmes. The commerce with this country is still small. Mr. Rangabee says it could be largely increased by direct trade. At present everything passes through the hands of English factors. There are now five chambers of commerce in Greece. The National Bank pays large dividends. The insurance companies of Syra and Patras are doing well.

In domestic manufactures Greece has not as yet accomplished very striking results. She has but twenty-two factories which use steam-power. The manufacture of wines promises to become important. More than one thousand articles made by Greek artificers were exhibited this summer at Paris.

Greece spends a much larger sum, in proportion to her entire revenue, upon education, than Saxony or Prussia. In 1866 she had 942 public schools for boys, containing 44,102 pupils, 39 private schools for boys, containing 2,140 pupils; 125 public schools for girls, containing 8,481 pupils, and 41 private schools for girls, containing 2,082 pupils. Besides these, she has unorganized schools containing 8,000 pupils, and orphan schools containing 158 pupils. These schools give a primary education. A grade above them are the national schools, 123 in number, with 294 teachers and 6,575 pupils, and private schools with 1,030 pupils. The next grade brings us to the gymnasia, or colleges, 16 in number, with 100 professors and 1,908 pupils. All these professors are doctors of philosophy. The system is completed by the university, with its 4 faculties, 12 fellows, 50 professors and 1,200 undergraduates. There are also, in Athens,

a polytechnic, a theological and a business institute, and several learned societies. The university has valuable museums. Twenty-nine newspapers are published in Athens; forty-nine in other Greek towns. There are also numerous periodicals, and the book-trade is steadily increasing.

We must refer our readers for a detailed explanation of the working of the government as well as for a very interesting sketch of brigandage in Greece, to the pamphlet itself. It remains to notice the financial condition of the Greek kingdom. The total revenue in 1833 was 7,721,269 drachmes; in 1860, 24,242,760 drachmes. The budget of 1867 will exceed 34,000,000 drachmes, which is at the rate of 23.43 drachmes per head. The expenditures in 1860 amounted to 26,074,493 drachmes. The total public debt is 340,000,000 drachmes. Mr. Rangabee says Greece will pay this debt as soon as she is enabled to do so by new loans, effected at the expense of her productions, and by the extension of her boundaries.

This is the present condition of Greece. In thirty-five years she has doubled her population, quintupled her revenue, rebuilt her towns and hamlets, greatly increased the area of cultivated land, extended widely her commerce, adopted an excellent educational system and created a literature. Her defects, in Mr. Rangabee's opinion, arise from the fact that her growth is repressed. On the day that Greece expands to her rightful boundaries these defects will begin to disappear.

THE CHAMPAGNE TRADE.

The Chamber of Commerce at Rheims has lately issued its usual annual report on the wine trade of Champagne for the year from April 1, 1866, to April 1, 1867, from which we learn that on the first named date the then existing stock in the cellars was 37,608,616 bottles, representing 313,405 hectol. During the year 10,283,886 bottles were sent direct to foreign countries, and 3,218,343 bottles disposed of to wholesale wine merchants, retailers, and consumers in France, making a total of 13,502,229 bottles, to which must be added 7,575,430 bottles sent from one manufacturer to another in the department of the Marne, thus bringing up the gross amount of the movement of the year to 21,077,657 bottles. The consumption and sale of the article have been steadily increasing since 1845, when the Chamber of Commerce first began to publish their valuable annual reports. In that year the quantity sold in France and exported to foreign countries was only 6,635,652 bottles; in 1853 it had risen to 10,407,039 bottles, in 1864 to 12,786,134 bottles, in 1866 it was 13,196,132 bottles, and in 1867—as above stated—it had risen to 13,502,229 bottles, having more than doubled itself since 1845. During that period the total sales in France and abroad have amounted to 214,145,043 bottles, and calculating the average price at only 3 fr. per bottles, it gives an aggregate value of 642,435,129 fr., or about £25,680,000. In former years the home consumption of champagne in France was about equal to one half of the quantity exported, but it has not increased in proportion to the magnified production, and latterly has been seldom more than one-third. The report adds—"It is calculated that besides the above there are more than 5,000,000 bottles of other wines sold and consumed under the spurious name of champagne, of which nothing is genuine but the corks and the labels; and still more frequently, and to a much greater extent, both the brand on the corks and the printed labels are produced by the most audacious fraud and barefaced forgery."

COMMERCIAL CHRONICLE AND REVIEW.

Counterfeit Seven-Thirties—The Money Market—General Trade—Rates of Loans and Discounts—Stock Exchange—Government Securities—Consols and American Securities at London—Receipts, Shipments and General Movement of Coin and Bullion—Course of Gold at New York—Course of Foreign Exchange.

As we go to press we learn that through advices received from the Treasury Department, Washington, that a counterfeit has been discovered upon the \$1,000 Seven-Thirty notes of the June issue. The notes had been received from the Sub-Treasury at New York, but to what amount could not be definitely stated until all the receipts had been examined. It is stated, however, that \$120,000 had been found at the time the advices were sent. After the information had been communicated to the brokers it was discovered that \$90,000 were in the hands of dealers, and to-day further amounts have been found to be in the hands of banks, bankers and others which will carry up the amount in the hands of Wall street firms to about \$150,000. We append an official account of the points in which the spurious notes are considered to differ from the genuine; but at the same time it must be said that the extended comparison of notes made in Wall street to-day has shown that some of these *criteria* are not to be entirely relied upon. In some of the points in which the spurious notes are said to differ from the genuine, the good notes differ from each other. So far as respects the execution of the notes, there appears to have been discovered but one point in which the counterfeit differs from all other notes with which it has been compared, viz., that in the letter u, in the word "Treasurer," under F. E. Spinner's signature, the letter is made with a hair line at the commencement in the good note; while there is no such stroke in the bad. The counterfeit differs, however, in all cases from the genuine notes in the seal, which in the former is larger. The seal on the false notes, however, is found to correspond exactly with that used on greenbacks. Putting these circumstances together, the theory is held by many dealers that the plates of the Treasury have been used, and also the Treasury seal, but that one appropriated for legal tenders instead of the one employed in printing the Seven-Thirties. The officers of the Treasury Department, however, regard the note as a thorough counterfeit; and it is said that the experts of the American Bank Note Company hold the same opinion.

It is impossible to estimate what amount of these notes have been put in circulation. Many of those received here are traced to the West, and as such a large amount is in the hands of the New York dealers, it is to be presumed that the entire issue is very extensive. The Treasury has not yet made any reclamation upon the parties from whom it has received the notes; but the officers of the Department anticipate having to take such action when the whole amount received has been ascertained. The dealers very generally consider that their responsibility ceased when the Treasury accepted the notes, upon the same principle as a party receiving payment for a spurious check from a bank is not subject to reclamation. We presume that the matter will be tested in the courts in the event of the Treasury attempting to return the notes to those from whom it has taken them.

It is stated that seventy thousand dollars of these well-executed counterfeit

Seven-Thirty Bonds had been presented at the Treasury Department for redemption. All of them were of the second series, due June, 1868, of the thousand dollar denomination, and either of the A or B series, ranging within the following named thousands, viz.: 68,000, 140,000, 160,000 and 180,000. The result of the examination as ordered by the Solicitor of the Treasury is—

First—The seal is slightly larger than the genuine, the red ink with which it is stamped is a shade lighter, and the points projecting from the seal are blurred and a little longer than the genuine.

Second—The imprint at the bottom of the face of the bond is set different in the margin, there being more space given it than the genuine.

Third—The borders of the coupons which are attached to the counterfeit bonds are larger, while the red figures are finer than in the genuine.

Fourth—The borders of the ornamental lathe work are blurred and somewhat indifferently executed.

Fifth—The figures denoting the bond are slightly uneven, while the blue ink in which they are printed is a duller blue, and lacks the metallic, glossy appearance of the genuine.

Sixth—There is, to the experts, a difference in the vignette—the female figure on the face of the bond—the lines are not so well shaded, nor is the black ink so well distributed.

The money market during September exhibited the activity usual at the Fall season. The demand for currency, to move the crops at the West, has been unusually large, owing not only to the abundance of the yield, but equally to the high prices of breadstuffs and the anxiety of the farmers to realise. The receipts of grain at the lake ports have been about double the quantity for the same period of 1866; and the Western banks have been taxed to their utmost in satisfying the wants of the movers of this large amount of products. The discounting and re-discounting of produce paper, and the withdrawal of the balances of Western banks have caused an outflow of currency, legal tender and bank, of probably fully \$25,000,000 within the month; and at the close the efflux continued in undiminished volume. The financial operations of the Government have also had an important bearing upon the course of the money market. At one period its sales of coin and of bonds largely exceeded its disbursements in the purchase of Seven-Thirty notes, resulting in a temporary withdrawal of currency from the banks which, together with the westward drain, and the calling in of funds from some of the national depositories, had the effect of producing a very sharp stringency, and a full 7 per cent. rate on demand loans. The city merchants have suffered inconvenience from this condition of things. As the banks could employ their balances at 7 per cent. on call they have been indifferent about discounting, and have confined their operations in paper to the best of their depositors. Large amounts of choice paper have been thrown upon the street at $7\frac{1}{2}$ @ 9 per cent.: while fair average names have sought buyers in vain at much higher rates.

The general trade of the city has been steady, but characterised by a cautious movement. The imports have been moderate compared with those of the same month last year, while the exports have shown a tendency toward larger figures. The decline in cotton caused, during the latter half of the month, a contraction of operations in cotton manufactures, and at the close holders showed a disposition to adjust prices to the reduced value of raw material. The woolen trade shows a

considerable aggregate movement; but values have been depressed by the prospect of heavy accumulations having to be forced off at the close of the season.

The following are the rates of loans and discounts for the month of September:

RATES OF LOANS AND DISCOUNTS.

	Aug. 9.	Aug. 16.	Aug. 23.	Aug. 30.
Call loans.....	3 @ 4	4 @ 5	7 @—	7 @—
Loans on Bonds and Mortgage.....	6 @ 7	6 @ 7	6 @ 7	6 @ 7
A 1, endorsed bills, 2 mos.....	6 @ 6½	6 @ 6½	7 @ 7½	7 @ 7½
Good endorsed bills, 3 & 4 mos.....	6½ @ 7½	6½ @ 7½	8½ @ 10	9½ @ 10
“ “ single names.....	9 @ 10	9 @ 10	10 @—	10 @—
Lower grades.....	11 @ 15	12 @ 18	12 @ 20	12 @ 20

The stringent tendency of the money market caused a sudden realizing movement at the Stock Exchange, and stocks held at the beginning of the month with much confidence in a rise corresponding to the improved earnings of the roads were sold at a decline ranging from 5@10 per cent. The fall, however, was followed by a steady reaction; but the month closed with a very feverish market. The total sales of stocks at both boards amounted to 1,627,139 shares against 1,446,873 shares in September, 1866.

The following table shows the volume of shares sold at the New York Stock Exchange Board and the open Board of Brokers in the three first quarters and in the month of September, and the total since January 1:

VOLUME OF SHARES SOLD AT THE STOCK BOARDS.

	1st Quarter.	2d Q'rter.	3d Q'rter.	September	Since Jan. 1.
Bank shares.....	7,815	11,183	9,070	1,819	26,000
Railroad “.....	5,079,773	4,910,868	4,365,793	1,446,063	14,802,500
Coal “.....	67,800	25,405	40,568	4,251	133,723
Mining “.....	123,887	91,188	92,564	10,564	307,600
Improv't “.....	81,369	108,485	68,649	11,650	269,150
Telegraph “.....	117,973	163,118	284,493	76,750	642,334
Steamship “.....	298,883	215,873	133,450	40,648	677,000
Expr's &c “.....	17,874	104,480	117,379	45,493	285,220
At New York Stock Ex.....	2,073,406	2,074,351	2,013,966	533,140	6,694,860
At Open B'd.....	2,653,443	3,540,659	2,366,230	1,004,980	14,585,290
Total 1867.....	5,794,849	5,615,010	5,010,806	1,637,139	14,802,500
Total 1866.....	6,173,087	5,342,110	4,383,801	1,446,873	14,802,500

United States securities have declined somewhat from the late high quotations, in sympathy with the pressure in the money market. The price of Five-Twenties in Europe have declined 1 per cent. within the month; but, notwithstanding, a fair amount of bonds has been exported.

The amount of Government bonds and notes, State and city bonds, and company bonds, sold at the New York Stock Exchange Board in the three first quarters and in September, and the total since January 1, is shown in the statement which follows:

BONDS SOLD AT THE N. Y. STOCK EXCHANGE BOARD.

	1st quarter.	2d quarter.	3d Quarter.	September.	Since Jan. 1.
U. S. bonds.....	\$18,703,630	\$40,838,350	\$43,294,050	\$17,840,000	\$103,776,000
U. S. notes.....	4,793,480	3,847,600	10,531,550	1,093,780	18,465,800
St's & city b'ds.....	3,834,100	7,601,660	7,954,300	2,397,900	24,488,000
Company b'ds.....	2,216,300	2,397,700	2,184,000	841,000	6,707,000
Total 1867.....	\$24,598,480	\$53,706,800	\$63,743,900	\$22,171,580	\$103,044,800
Total 1866.....	23,600,500	36,414,350	44,050,100	12,732,850	111,044,800

The closing prices of Consols and certain American securities (viz. U. S. 6's, 5-20's 1862, Illinois Central and Erie Railway shares and Atlantic and Great

The quotations for Three-years' Compound Interest Notes on each Thursday of the month have been as shown in the following statement :

PRICES OF COMPOUND INTEREST NOTES AT NEW YORK, SEPTEMBER, 1887.

Issue of	September 5.	Sept. 12.	Sept. 19.	Sept. 26.
October, 1884.....	118% @ 119%	119	@ 119%	119% @ 119%
December, '84.....	117% @ 118%	118	@ 118%	118% @ 118%
May, 1885.....	116% @ 117%	117	@ 117%	117% @ 117%
August, 1885.....	116	@ 116%	116% @ 116%	116% @ 116%
September, '85.....	115% @ 115%	115%	@ 115%	115% @ 115%
October, 1885.....	115	@ 115%	115% @ 115%	115% @ 115%

The first series of figures represents the buying and the last the selling prices at first-class brokers' offices.

The following are the closing quotations at the regular board on each Friday of the last six weeks.

	Aug. 22.	Aug. 30.	Sept. 6.	Sept. 13.	Sept. 20.	Sept. 27.
Cumberland Coal.....						20
Quicksilver.....	97½	98½	99		94½	98½
Canton Co.....			47½	47½	44½	49½
Mariposa pref.....			90			15
New York Central.....	105	105½	106½	106½	106	107½
Erie.....	69½	70½	9½	70	61½	61½
Hudson River.....	124½	124½	128½	128	128½	127½
Reading.....	104	104	102½	103½	101½	101½
Michigan Southern.....	61	58½	89½	89½	78	81½
Michigan Central.....	110	110	111	111	109	109
Cleveland and Pittsburg.....	93	94	80		81	79
Cleveland and Toledo.....		126½	126	120	128	128½
Northwestern.....	45½	46½	46	46½	39½	41
" preferred.....	69½	70½	70½	70½	64½	65½
Rock Island.....	109½	108½	104½	104	105½	106½
Port Wayne.....	108½	106½	106	106½	106½	106½
Illinois Central.....	119		120½		121	

The receipts and shipments of coin and bullion at New York in the three first quarters, and in the month of September, with the total since January 1, have been as shown in the following statement :

RECEIPTS AND SHIPMENTS OF COIN AND BULLION AT NEW YORK.

	First quarter.	Second quarter.	Third quarter.	Month of September.	Since Jan. 1.
Rec'ts f'm California.....	\$6,109,861	\$6,599,505	\$9,240,079	\$2,611,440	\$28,559,885
Imp'ts f'm for'n ports.....	409,077	1,147,619	939,010	342,160	2,837,866
Total receipts.....	\$6,518,938	\$8,047,124	\$10,179,089	\$2,953,600	\$31,597,751
Exp'ts to foreign ports.....	6,560,908	18,028,708	17,511,959	2,376,301	\$44,479,876
Excess of exports.....	\$48,020	\$9,981,535	\$7,331,600	\$.....	\$17,552,155
Excess of receipts.....				676,799	.....

The following statement shows the amount of receipts and exports in September and since January 1, for seven years :

	—California Receipts—		—Foreign Imports—		—Foreign Exports—	
	Sept.	Since Jan. 1.	Sept.	Since Jan. 1.	Sept.	Since Jan. 1.
1887.....	\$2,611,440	\$28,350,085	\$342,160	\$2,495,706	\$2,376,301	\$2,495,706
1886.....	2,834,433	80,537,107	5,193,473	6,868,870	534,550	164,028,529
1885.....	2,040,445	18,751,760	194,924	1,805,459	2,475,973	22,678,220
1884.....	1,039,169	6,384,530	53,220	1,589,144	2,585,398	24,968,220
1883.....	750,259	9,004,313	78,231	1,222,131	3,650,397	22,588,220
1882.....	2,641,918	15,665,651	121,318	944,077	3,078,919	23,588,220
1881.....	2,815,243	\$8,236,408	1,231,014	35,195,780	1,14,756	\$2,378,224

The following formula furnishes the details of the general gold movement at New York :

GENERAL MOVEMENT OF COIN AND BULLION AT NEW YORK.

	1st quarter.	2d quarter.	3d quarter.	Sept.	Since Jan. 1.
In banks at commen't.....	\$12,185,223	\$3,522,609	\$7,768,995	\$7,371,595	\$12,185,223
Rec's from California.....	6,109,861	6,599,555	9,240,079	2,611,440	\$28,559,885
Imp's f'm for'n ports.....	409,077	1,147,619	939,010	342,160	2,837,866
Coin int'st p'd by U.S.....	10,888,808	17,708,085	19,644,897	2,716,959	43,958,752
Total repo'd sup'y.....	\$30,542,463	\$24,962,808	\$37,592,983	\$12,942,154	\$86,048,708

	1st quarter.	2d quarter.	3d quarter.	Sept.	Since Jan. 1.
Exp. to for'n ports.....	\$4,566,968	\$18,083,709	\$17,511,289	\$2,976,801	\$42,108,866
Customs duties.....	88,170,628	87,188,898	84,665,968	11,967,894	95,022,468
Total withdrawn.....	\$92,737,596	\$105,272,607	\$102,177,257	\$14,944,695	\$137,131,334
Excess of rep'd sup'y.....					
Excess of withdraw'ls.....	\$9,186,128	\$10,861,788	\$14,584,176	\$1,802,471	\$50,523,680
In banks at close.....	8,682,609	7,768,996	9,496,168	9,496,168	9,496,168

Deficit in reported supply, made up from unreported sources..... \$17,717,728 \$18,620,788 \$24,080,888 \$10,798,624 \$60,418,868

The price of gold has fluctuated between 141@146½. The unsettled condition of European politics has had a strong tendency to sustain the premium, but the sales of coin by the Treasury, and the anticipation of the payment of \$25,000,000 of coupons in November have checked the upward movement. The Treasury sales and the payment of the Ten-Forty coupons have resulted in a gain of over two millions in the amount of specie in the banks. The exports of specie for the month reach the moderate total of \$2,276,801.

The statement which follows shows the daily fluctuations in the price of American gold coin at the Exchange Gold Room during the month of September:

COURSE OF GOLD AT NEW YORK, SEPTEMBER, 1867.

Date.	Open'g.	Lowest.	High'st.	Closing.	Date.	Open'g.	Lowest.	High'st.	Closing.
Sunday.....	1				Saturday.....	21	142½	143½	143½
Monday.....	2	141½	141½	141½	Sunday.....	22	143	143½	143½
Tuesday.....	3	141	141	141½	Monday.....	23	143	143½	143½
Wednesday.....	4	141½	141½	142	Tuesday.....	24	142½	143½	143½
Thursday.....	5	142½	142½	142½	Wednesday.....	25	143½	143½	144
Friday.....	6	142½	142½	142½	Thursday.....	26	143½	143½	143½
Saturday.....	7	142½	142½	143	Friday.....	27	143½	143½	143½
Sunday.....	8				Saturday.....	28	143½	143½	143½
Monday.....	9	142½	143½	143½	Sunday.....	29			
Tuesday.....	10	143½	143½	143½	Monday.....	30	143½	143½	143½
Wednesday.....	11	144½	144½	144½					
Thursday.....	12	146½	145½	145½	Sept. 1, 1867.....	141½	141	146½	143½
Friday.....	13	145½	144½	144½	" 1867.....	147½	143½	147½	146½
Saturday.....	14	144½	144½	144½	" 1867.....	144½	142½	145	144
Sunday.....	15				" 1864.....	245	191	254½	198
Monday.....	16	144½	144	144½	" 1868.....	127	126½	143½	141½
Tuesday.....	17	144½	144½	144½	" 1862.....	116½	116½	124	122½
Wednesday.....	18	144½	144½	145½	" 1861.....	109	109	100	100
Thursday.....	19	145½	144	145½	Since Jan. 1, 1867.....	132½	132½	146½	143½
Friday.....	20	142½	142½	142½					

The tendency of foreign exchange has been steadily downward, the decline in rates for the month being about ½ per cent. The strictly moderate remittances of importers have been, to a considerable extent, provided for by bills drawn against shipments of Five-Twenties.

The following table shows the course of foreign exchange, daily, for the month:

COURSE OF FOREIGN EXCHANGE (60 DAYS)—AT NEW YORK—SEPTEMBER.

Days.	London. cents for 64 pence.	Paris. centimes for dollar.	Amsterdam. cents for florin.	Bremen. cents for rix daler.	Hamburg. M. banco.	Berlin. cents for thaler.
1.....	109½@109½	518½@515	40½@41	78½@78½	86½@86½	71½@72
2.....	109½@109½	518½@515	40½@41½	78½@78½	86½@86½	71½@72½
3.....	109½@109½	518½@515	40½@41½	78½@78½	86½@86½	71½@72½
4.....	109½@109½	518½@515	40½@41	78½@78½	86½@86½	71½@72½
5.....	109½@109½	518½@515	40½@41	78½@78½	86½@86½	71½@72½
6.....	109½@110	518½@515	40½@41	78½@78½	86½@86½	71½@72½
7.....	109½@110	518½@515	41	78½@78½	86½@86½	71½@72½
8.....						
9.....	109½@110	518½@515	40½@41	78½@78½	86½@86½	71½@72

Days.	London.	Paris.	Amsterdam.	Bremen.	Hamburg.	Berlin.
10.....	109% @ 110	518% @ 515	40% @ 41	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
11.....	109% @ 110	518% @ 515	41 @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
12.....	109% @ 110	518% @ 515	41 @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
13.....	109% @ 109 1/2	518% @ 515	40% @ 41	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
14.....	109% @ 109 1/2	518% @ 515	40% @ 41	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
15.....	109% @ 109 1/2	518% @ 515	41 @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
16.....	109% @ 109 1/2	517% @ 516 1/2	41 @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
17.....	109% @ 109 1/2	517% @ 516 1/2	41 @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
18.....	109% @ 109 1/2	517% @ 516 1/2	41 @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
19.....	109% @ 109 1/2	517% @ 516 1/2	41 @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
20.....	109% @ 109 1/2	517% @ 516 1/2	41 @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
21.....	109% @ 109 1/2	517% @ 516 1/2	41 @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
22.....	109% @ 109 1/2	517% @ 516 1/2	41 @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
23.....	109% @ 109 1/2	517% @ 516 1/2	41 @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
24.....	109% @ 109 1/2	517% @ 516 1/2	41 @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
25.....	109% @ 109 1/2	517% @ 516 1/2	41 @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
26.....	109% @ 109 1/2	517% @ 516 1/2	41 @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
27.....	109% @ 109 1/2	518% @ 517 1/2	41 @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
28.....	109% @ 109 1/2	518% @ 517 1/2	40% @ 41	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
29.....	109% @ 109 1/2	518% @ 517 1/2	40% @ 41	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
30.....	109% @ 109 1/2	518% @ 517 1/2	40% @ 41	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
Sep.....	109 @ 110	521% @ 515	40% @ 41 1/2	78% @ 78 1/2	35% @ 36 1/2	71% @ 72 1/2
Aug.....	109% @ 110 1/2	518% @ 513 1/2	40% @ 41 1/2	78 @ 79 1/2	35% @ 36 1/2	71% @ 72 1/2
July.....	109% @ 110 1/2	517% @ 511 1/2	40% @ 41 1/2	78 @ 79 1/2	35% @ 36 1/2	71% @ 72 1/2
Jun.....	109% @ 110 1/2	518% @ 511 1/2	40% @ 41 1/2	78% @ 79 1/2	35% @ 36 1/2	71% @ 72 1/2
May.....	109% @ 110 1/2	520 @ 510	40% @ 41 1/2	78% @ 80	35% @ 36 1/2	71% @ 72 1/2
Apr.....	109% @ 109 1/2	522% @ 512 1/2	40% @ 41 1/2	78% @ 79 1/2	35% @ 36 1/2	71% @ 72 1/2
Mar.....	108 @ 109 1/2	520 @ 515	40% @ 41 1/2	78 @ 79 1/2	35% @ 36 1/2	71% @ 72 1/2
Feb.....	108% @ 109	523% @ 515	40% @ 41 1/2	78% @ 79 1/2	35% @ 36 1/2	71% @ 72 1/2
Jan.....	108% @ 109 1/2	520 @ 513 1/2	41% @ 41 1/2	78% @ 79 1/2	35% @ 36 1/2	71% @ 72 1/2
Since Jan. 1....	108 @ 110 1/2	525 @ 510	40% @ 41 1/2	78 @ 80	35% @ 36 1/2	71% @ 72 1/2

The annual meeting of the Clearing-House Association was held the past week. The transactions for the past year amounted to \$29,520,122,921 35, and the average daily transactions to \$96,818,580 91. The total transactions since the organization of the Clearing-House on the 11th October, 1853, a period of four teen years, reach the immense aggregate of \$187,890,467,794 68, all of which transactions have been done without loss or error. The subjoined table shows the aggregate for each year :

Year ending Oct. 1.	Exchanges	Balance
1854.....	\$5,750,455,997 06	\$27,417, 00 00
1855.....	5,392,913,096 28	289,694, 00 00
1856.....	6,806,213,823 47	334,714, 00 00
1857.....	8,393,226,718 06	583,313, 00 00
1858.....	4,756,664,326 09	514,288, 00 00
1859.....	6,448,008,566 01	592,984, 00 00
1860.....	7,331,148,066 69	580,662, 00 00
1861.....	8,915,749,758 05	565,882, 00 00
1862.....	6,871,448,591 20	415,530, 00 00
1863.....	14,307,597,448 60	677,626, 00 00
1864.....	24,097,198,056 99	823,779, 00 00
1865.....	26,082,284,341 89	1,033,765, 00 00
1866.....	28,717,146,914 09	1,066,135, 00 00
1867.....	28,676,159,473 20	1,144,963, 00 00
Total.....	\$179,963,393,118 71	\$7,925,174, 00 00

JOURNAL OF BANKING, CURRENCY, AND FINANCE

Returns of the New York, Philadelphia and Boston Banks.

Below we give the returns of the Banks of the three cities since Jan. 1 :

NEW YORK CITY BANK RETURNS.						
Date.	Loans.	Specie.	Circulation.	Deposits.	Legal Tend's.	Ag. clear'd
January 5.	\$157,862,400	12,794,892	32,762,779	202,533,564	55,094,121	428,997, 00 00
January 12.....	258,928,458	14,613,477	32,625,108	202,517,698	62,246,870	605,122, 00 00
January 19.....	265,033,223	15,368,207	32,654,928	201,500,115	62,225,398	526,640, 00 00
January 26.....	251,674,801	16,074,097	32,957,198	197,952,970	62,426,566	525,222, 00 00

Date.	Loans.	Specie.	Circulation.	Deposits.	Legal Tend's.	Ag. clear'gs
February 2...	251,264,265	16,833,981	24,295,247	200,511,596	65,944,541	512,467,259
February 9...	250,265,825	16,157,267	20,777,100	198,241,835	67,628,992	508,825,529
February 16...	253,181,328	14,797,622	22,956,809	193,073,292	64,642,940	495,813,829
February 23...	257,632,994	13,518,456	22,006,141	192,800,247	62,153,895	449,574,000
March 2...	261,166,486	11,579,881	22,294,428	198,018,914	62,014,195	465,531,529
March 9...	263,141,458	10,683,182	22,409,811	200,253,587	64,532,440	514,172,266
March 16...	263,012,974	9,968,722	22,499,682	197,955,504	62,813,029	496,355,119
March 23...	269,400,815	9,143,918	22,519,401	191,375,615	60,904,858	472,023,782
March 30...	255,182,264	8,524,619	22,689,195	189,480,250	62,459,811	459,860,602
April 6...	264,470,027	8,133,813	22,774,578	183,861,269	59,021,775	531,895,184
April 13...	260,102,178	8,856,229	22,702,947	182,861,226	60,292,515	525,953,462
April 20...	247,561,781	7,623,585	22,648,671	184,090,256	64,060,616	447,814,575
April 27...	247,737,281	7,404,204	22,601,225	187,674,241	67,980,251	446,454,422
May 4...	250,871,558	9,903,177	22,571,747	195,721,072	70,587,407	559,860,118
May 11...	253,682,229	14,959,590	22,596,869	200,242,822	67,986,559	524,319,769
May 18...	257,961,874	15,667,252	22,632,201	201,426,254	63,693,501	563,675,793
May 25...	256,091,905	14,083,607	22,697,252	193,678,245	62,662,440	491,732,622
June 1...	252,791,514	14,617,070	22,747,089	190,356,143	58,459,537	442,675,585
June 8...	250,477,293	15,699,038	22,719,088	184,780,285	55,923,117	401,731,216
June 15...	245,325,435	13,656,289	22,707,199	180,317,763	57,994,294	400,968,602
June 22...	245,640,477	9,899,586	22,633,171	179,477,170	62,816,192	442,440,801
June 29...	242,647,904	7,768,996	22,542,560	186,213,227	70,174,705	493,914,356
July 6...	246,861,227	10,653,171	22,669,297	191,594,512	71,106,472	494,081,580
July 13...	247,913,008	12,715,404	22,652,869	197,872,063	73,495,708	521,259,463
July 20...	249,590,265	11,197,700	22,574,943	195,455,923	72,441,301	491,890,952
July 27...	251,242,520	8,727,894	22,596,556	200,808,886	74,005,940	481,607,225
August 3...	254,940,016	6,461,949	22,559,117	201,152,784	76,098,763	468,021,746
August 10...	253,427,240	5,811,997	22,565,278	199,408,705	76,047,481	469,508,035
August 17...	252,222,411	5,920,607	22,669,767	194,046,591	69,472,793	414,289,517
August 24...	250,697,079	6,028,626	22,726,249	192,744,101	64,920,830	421,430,637
August 31...	247,877,623	7,271,596	22,715,122	190,992,315	67,923,571	385,521,548
September 7...	250,224,660	7,907,619	22,702,172	195,162,114	66,657,445	441,767,285
September 14...	254,160,587	8,184,946	24,015,322	193,056,775	65,176,908	514,688,723
September 21...	254,794,027	8,617,498	24,056,422	185,602,929	57,709,285	562,142,260
September 28...	251,918,751	9,496,163	24,147,269	181,429,410	55,991,526	600,698,710
October 5...	247,984,260	9,268,603	24,025,521	172,447,422	56,862,565	570,187,624

PHILADELPHIA BANK RETURNS.

Date.	Legal Tenders.	Loans.	Specie.	Circulation.	Deposits.
January 5...	\$20,209,064	52,812,217	903,662	10,828,820	41,208,227
January 12...	20,008,255	52,528,491	963,820	10,829,577	41,033,421
January 19...	19,448,099	52,457,807	577,545	10,381,595	39,046,645
January 26...	19,263,274	52,103,473	880,589	10,364,683	39,001,770
February 2...	19,269,123	55,35,130	871,564	10,430,816	39,596,712
February 9...	19,669,260	52,284,329	872,614	10,449,982	39,811,225
February 16...	18,892,747	52,572,130	807,110	10,522,972	40,040,717
February 23...	17,897,598	52,294,721	841,222	10,536,424	39,666,613
March 2...	18,150,687	51,979,178	816,843	10,512,600	39,567,388
March 9...	17,521,705	51,851,463	823,755	10,572,068	37,371,672
March 16...	16,965,618	50,518,394	852,922	10,580,911	37,826,
March 23...	16,071,780	50,572,490	807,418	10,611,987	37,616,
March 30...	15,856,948	50,880,206	602,143	10,621,523	
April 6...	15,863,745	50,998,221	644,719	10,651,615	37,796,595
April 13...	16,188,407	51,223,776	546,625	10,645,267	37,827,623
April 20...	16,523,296	51,611,441	486,535	10,647,224	37,820,520
April 27...	16,787,901	51,890,959	292,817	10,628,021	36,224,870
May 4...	17,196,558	52,054,267	296,053	10,629,695	37,871,064
May 11...	17,278,919	52,474,858	408,762	10,627,953	38,172,169
May 18...	16,770,491	52,826,320	402,973	10,620,821	38,220,828
May 25...	16,019,180	52,526,170	269,122	10,626,520	37,778,763
June 1...	16,881,109	52,747,208	234,926	10,627,422	37,322,144
June 8...	16,380,720	52,152,124	246,615	10,642,920	37,252,614
June 15...	16,300,010	52,192,049	262,261	10,042,296	37,174,269
June 22...	15,964,494	52,968,441	272,208	10,642,294	37,322,279
June 29...	16,105,61	52,528,923	226,127	10,641,211	36,616,647
July 6...	16,022,975	52,120,272	461,261	10,640,201	37,077,456
July 13...	16,224,914	52,802,268	419,269	10,641,770	37,895,226
July 20...	16,608,880	52,120,569	271,744	10,627,621	38,170,419
July 27...	16,926,112	52,104,473	223,112	10,622,750	37,829,640
August 3...	16,722,192	52,427,840	202,065	10,626,925	38,094,543
August 10...	16,902,125	52,117,559	204,979	10,627,761	38,061,477
August 17...	15,767,145	52,542,442	217,262	10,626,210	38,064,825
August 24...	16,922,516	52,824,020	214,249	10,622,224	38,459,521
August 31...	15,717,909	52,724,627	207,658	10,626,266	38,422,355
September 7...	16,942,622	52,770,422	272,714	10,622,724	38,452,529
September 14...	16,020,123	52,722,202	222,222	10,622,727	38,222,227
September 21...	15,942,422	52,540,501	222,222	10,622,744	38,222,227
September 28...	15,912,724	52,622,222	222,222	10,622,722	38,222,227
October 5...	15,527,404	52,041,100	222,222	10,627,221	38,421,212

BOSTON BANK RETURNS.

(Capital Jan. 1, 1866, \$41,900,000.)

	Loans.		Legal		Deposits.		Circulation.	
		Specie.	Tenders.				National.	State.
January 7.....	\$97,009,348	1,183,451	17,083,367	40,534,618	24,580,367	213,664		
January 14.....	98,461,778	1,384,800	16,829,36	40,246,616	24,997,446	211,740		
January 21.....	96,226,993	1,073,160	16,594,29	38,679,604	24,376,163	203,271		
January 28.....	97,691,399	1,068,339	16,816,481	39,219,341	24,716,507	203,386		
February 4.....	97,748,461	956,589	16,394,604	39,708,953	24,691,076	204,064		
February 11.....	97,264,163	873,396	15,102,479	39,474,359	24,686,663	203,686		
February 18.....	96,949,478	929,940	15,898,388	38,900,500	24,765,430	203,686		
February 25.....	96,537,900	779,493	15,741,046	37,693,963	24,663,605	203,386		
March 4.....	96,050,737	963,887	15,948,103	38,816,573	24,675,767	201,686		
March 11.....	92,075,976	695,447	15,719,479	36,712,053	24,846,631	198,576		
March 18.....	93,156,486	563,194	16,970,979	36,751,733	24,800,533	200,126		
March 25.....	92,661,060	516,184	16,557,905	36,751,733	24,788,733	200,686		
April 1.....	91,722,347	435,113	17,112,433	37,056,388	24,843,376	200,686		
April 8.....	91,679,549	456,761	16,960,418	37,363,775	24,861,533	200,686		
April 15.....	91,712,414	376,843	16,815,855	37,318,595	24,388,819	207,286		
April 22.....	92,473,815	343,712	16,549,598	38,307,548	24,653,300	200,126		
April 29.....	92,353,923	339,854	16,936,564	37,837,092	24,811,437	200,686		
May 6.....	92,671,140	539,878	16,571,136	38,721,789	24,784,533	202,686		
May 13.....	92,426,114	517,597	16,562,421	38,504,761	24,808,963	200,544		
May 20.....	92,533,587	507,806	16,499,819	37,874,852	24,388,469	203,486		
May 27.....	92,226,077	441,073	16,883,361	37,123,051	24,805,880	202,686		
June 3.....	92,094,925	571,536	17,178,901	37,076,594	24,783,734	179,286		
June 10.....	92,426,197	494,767	16,787,854	36,083,712	24,804,153	200,126		
June 17.....	92,735,436	511,085	15,719,796	36,089,928	24,771,773	177,686		
June 24.....	92,951,168	470,544	15,758,896	36,531,129	24,768,947	197,544		
July 1.....	92,984,708	617,456	16,055,141	37,476,373	24,777,873	200,686		
July 8.....	91,717,773	915,299	16,065,466	36,351,040	24,801,833	200,444		
July 15.....	91,616,453	833,466	15,307,528	36,440,451	24,771,633	200,686		
July 22.....	91,095,511	650,203	15,437,636	35,323,612	24,744,231	200,686		
July 29.....	91,531,214	361,973	15,543,401	35,543,723	24,653,743	200,686		
August 5.....	91,307,553	473,045	15,511,084	35,586,460	24,655,073	200,686		
August 12.....	91,098,873	412,217	15,196,701	35,323,576	24,670,653	200,686		
August 19.....	90,901,657	365,137	14,697,154	35,909,683	24,613,921	200,686		
August 26.....	90,915,437	396,576	15,175,423	35,790,634	24,707,736	201,286		
September 2.....	91,011,818	400,680	16,290,583	35,810,808	24,784,146	200,686		
September 9.....	91,726,719	510,564	14,674,669	35,666,190	24,733,967	202,126		
September 16.....	91,923,453	453,093	13,433,833	35,660,369	24,817,769	202,126		
September 23.....	91,022,167	497,016	13,864,108	35,198,751	24,801,563	172,126		
September 30.....	90,403,053	453,339	12,967,468	34,383,633	24,980,384	200,686		
October 7.....	90,777,103	417,073	13,046,269	33,394,633	24,855,585	202,126		

CONTENTS FOR OCTOBER.

No.	PAGE.	No.	PAGE.
1. Causes of Fluctuations in the Bank of England Rate of Interest.....	264	12. The Breadstuffs Market.....	260
2. The Suez Canal.....	263	13. Cotton Growing and the Cotton Tax.....	260
3. Railroad Earnings for August.....	266	14. Mount Carmel Summit Railway.....	265
4. The Pinch in the Money Market.....	268	15. Greenville and Columbia (S. C.) Railroad.....	269
5. Railroads and Canals for Freight.....	261	16. Debt and Finances of Albany.....	267
6. Cotton Movement and Crop for 1866-7.....	264	17. The State of Europe.....	267
7. Cleveland and Toledo Railroad.....	269	18. Gold Mining in Victoria.....	269
8. Public Lands of the United States.....	272	19. Public Debt of the United States.....	265
9. The Three per Cent. Legal Tender Certificates.....	267	20. Progress of Greece.....	267
10. Reforms in the National Banks.....	269	21. The Champagne Trade.....	269
11. Census of Rhode Island, 1865.....	291	22. Commercial Chronicle and Review.....	269
12. The Public Debt.....	298	23. Journal of Banking, Currency, and Finance.....	268

The following advertisements appear in our advertising pages this month:

MERCANTILE.
 Little's Fire & Burglar-Proof Safe—198 B'way.
 Lewis Andendried & Co.—110 Broadway—Anthracite and Bituminous Coal.
 A. B. Sands & Co.—130-141 William St.—Drugs
 Duryea's Malzers—166 Fulton street.
BANKERS & BROKERS.
 Duncan, Sherman & Co.—Cor. Pine & Nassau.
 L. P. Morton & Co.—20 Broad Street.
 Tenth National Bank—330 Broadway.
 Ninth National Bank—363 Broadway.

Lockwood & Co.—24 Broadway.
 Barstow, Eddy & Co.—26 Broad St.
 Gilmore, Dunlap & Co.—Cincinnati.
 DeWitt, Kittle & Co.—88 Wall St.
 Vermilye & Co.—44 Wall St.
 Eugene Kelly & Co.—36 Wall St.
 Simon De Visser—52 Exchange Place.
INSURANCE.
 Fidelity Insurance Co.—17 Broadway.
 Marine—Great Western Insurance Co.
 Fire—Hope Fire Ins. Co.—28 Broadway

THE MERCHANTS' MAGAZINE

AND COMMERCIAL REVIEW.

NOVEMBER, 1867.

CENTRAL STATISTICAL COMMISSION OF AUSTRIA; ANALYSIS OF REPORT FOR 1866.*

BY W. THOMAS NEWMARCH,

Associate of King's College, London, and A.A., Oxon.

The Central Statistical Commission at Vienna is composed of twenty members, appointed to it officially from among the secretaries and heads of the governmental departments, and is presided over by M. von Glauz, a counsellor in the Ministry of State.

The Commission holds monthly meetings, at which communications are read by the members, and reports presented by the Select Committees named by the Commission to investigate particular subjects; in fact, the Commission would seem to combine the functions of the Statistical Society and the Statistical Department of the Board of Trade.

The Commission publishes an annual report, and the issue for 1866 contains much valuable information.

Among the subjects of the thirty-nine memoirs and papers contained in the report, the following are of the greatest general interest.

* Read before the Statistical Society of London, Tuesday, 18th June, 1867.

The reports of the Select Committees named to prepare—A Population Table (to be based on the Census of 1861); to prepare a Statistical Handbook; to prepare a set of Questions to be filled up by the Secretaries of Legation and by Consuls, concerning the Commerce of the different countries where they reside, in the same manner as the Reports made by the Secretaries of the English Legations, and presented annually to Parliament; to consider Criminal Statistics, Railway Statistics, and the Statistics of Lunatic Asylums.

The reports on the above-mentioned subjects are very similar to the reports on the same subjects in this country.

Among the papers read before the Commission are three of great interest and value, to which a fuller notice may here be given, viz:—

(a) A Statement of the Comparative Consumption of Articles of Food in Vienna, by Dr. Ficker.

(b) Statistics of Marriages, Births, and Deaths from 1851 to 1864, together with the prices of Wheat and Rye, by M. Schimmer, of the Bureau of Administrative Statistics.

(c) Statistics of the Losses of the Austrian Army in the Campaign against Prussia in 1866, communicated from the Ministry of War.

The information afforded by the first-named paper (a) is comprised in the following table:—

[A.]—Consumption of Food, &c., in Vienna, per Head of Population.

Article.	Amount.	1850.	1857.	1864.
Beer.....	Quarts	18.3	19.3	21.8
Wine....	"	7.6	6.6	6.1
Meat.....	lbs.	120.6	120.6	115.1
Flour and bread.....	"	266.6	281.4	255.0
Cheese.....	"	3.1	3.3	3.0
Butter.....	"	6.3	6.8	6.7
Lard.....	"	13.2	14.7	13.6
Eggs.....	No.	99.4	98.0	81.6
Fresh fruit.....	lbs.	35.6	52.1	48.7
Firewood.....	Cubic feet	57.2	47.3	33.4
Coal.....	lbs.	191.9	252.9	476.4

It will be seen that the greatest increase has taken place in the consumption of coal and the greatest decrease in that of firewood, showing how even in Vienna coal is supplanting wood as the fuel for household use.

The nearest coal mines to Vienna are at Wollfsegg, near Gmunden, on the Western Railway, and at Leoben, near Bruck, in Styria, on the Southern Railway; Wollfsegg is about 100 miles and Leoben 120 miles from Vienna. The quality of the coal at Leoben is, however, much superior to that at Wollfsegg. Both are lignites.

Next with regard to Mr. Schimmer's paper on the Statistics of Marriages, Births, and Deaths.

His tables commence with the year 1851, which was the first year in which statistics were available from the whole of the empire.

The prices of wheat and rye are given in the table in metzen, which is equal to 13.6 gallons, so that 5 metzen make a quarter as nearly as pos-

sible; the prices have, consequently, been multiplied by 5, and the florins converted into shillings, at an exchange of 2s., so that the prices in the tables which follow are in the same form as those used in this country, viz., in shillings sterling per quarter.

The first table contains the total number of marriages in each of the fourteen years, 1851 to 1864, together with columns showing the number of those marriages which were first and second marriages respectively, and the prices of wheat and rye.

It is remarkable that the marriages follow the prices of the chief articles of food almost more accurately than they do in this country, and are consequently least in number in 1855, when wheat was at the highest, namely, 60s. 4d. per quarter. In that year it is curious to observe that the diminution caused by the high price of food took place in first and not in second marriages, the number of which is, in fact, 2,000 above the average of the fourteen years.

[B]—*Marriages in each Year from 1851 to 1864, together with the Prices of Wheat and Rye.*

Year.	Total Marriages.	Among Single Persons.	Among Widows and Widowers.	Price of Wheat, per qr.	Price of Rye, per qr.
1851.....	316,236	223,161	93,075	33s. 10d.	24s. 8d.
1852.....	297,787	216,768	81,019	38 6	31 0
1853.....	268,627	188,045	75,582	45 6	33 10
1854.....	241,799	162,789	79,010	53 1	43 8
1855.....	228,615	146,387	82,128	60 4	44 8
1856.....	295,970	199,809	96,661	54 8	36 2
1857.....	281,643	200,763	80,875	44 8	28 0
1858.....	280,658	200,205	80,863	43 2	23 2
1859.....	242,371	169,823	72,548	45 2	29 8
1860.....	289,119	210,934	78,185	43 9	30 8
1861.....	286,244	210,227	76,017	44 2	31 1
1862.....	304,188	225,221	78,967	44 6	33 8
1863.....	296,951	218,861	78,090	42 6	31 11
1864.....	285,628	212,525	73,103	37 6	25 0
Average.....	279,829	198,934	80,897	45 4	33 1

A decrease occurred in 1855, which had for its cause the cholera, and another decrease took place in 1859, which was caused by the Italian war.

The great increase in 1856 was partly caused by the cessation of the cholera, and partly by the Concordat concluded with the Pope, by which people who had been living together were compelled to marry to escape certain legal and ecclesiastical consequences.

The next table (C) contains the *marriages in each month*, with the respective proportion which each particular month bears to the annual total.

The marriages are classified among the civil and the military population and the inhabitants of the great towns, Vienna, Pesth and Prague.

[C.]—*Austrian Empire: Marriages according to Months, 1851-64.*

Month.	Civil Population.			Military population.			Popul'tn of G't Towns		
	Average in 14 Years.	Daily Average of Month.	Pro- portion p. ct.	1851 to 1864.	Daily Average of Month.	Pro- portion p. ct.	1851 to 1864.	Daily Average	Pro- portion p. ct.
Jan. ..	85,797	1,155	12.6	1,274	411	11.5	5,710	184	6.9
Feb. ..	68,591	1,985	21.6	1,886	286	8.0	12,419	444	16.7
March ..	7,219	283	2.6	821	184	2.9	1,961	63	2.4
April..	10,725	357	3.9	765	255	7.2	4,367	146	5.5
May ..	22,091	718	7.7	1,016	323	9.2	9,319	301	11.3
June ..	16,327	545	5.9	909	303	8.5	6,021	201	7.8
July ..	12,581	406	4.4	757	244	6.8	5,624	181	6.8
Aug. ..	11,760	379	4.1	808	259	7.3	7,155	231	8.7
Sept. ..	13,459	449	4.9	944	315	8.2	6,208	207	7.8
Oct. ..	32,451	724	7.9	984	301	8.4	7,840	253	9.5
Nov. ..	64,440	2,148	23.3	2,178	724	20.3	12,945	431	16.3
Dec. ..	3,499	113	1.2	124	40	1.1	489	16	0.6

The two remarkable diminutions in March and December arise from marriages being forbidden by the Roman Catholic Church during Lent and Advent. The greatest number of marriages take place previous to Advent, and during the Carnival previous to Lent.

The next table (D) shows the *Births and Deaths* in each year from 1851 to 1864, together with the excess of Births over Deaths, and also the mortality between Birth and five years old.

The Births show an excess in every year except 1855, when the cholera prevailed. In that year the Deaths exceeded the Births by 284,910, in fact by about as many as the Births should have exceeded the Deaths; the population was, therefore, thrown back two years.

A partial recovery took place in 1856-57, for the weaker members of the population having been carried off by the epidemic, those who remained behind were strong enough to outlive ordinary causes of mortality during the two following years.

[D.]—*Austrian Empire: Births and Deaths, 1851-64.*

Year.	Births.	Excess of Births over Deaths.	Died Under 5 Years Old.	Deaths.
1851.....	1,289,886	325,330	508,294	964,006
1852.....	1,302,240	314,147	469,982	983,093
1853.....	1,279,226	183,107	514,181	1,096,110
1854.....	1,208,853	180,965	514,678	1,177,335
1855.....	1,151,039	284,910	545,477	1,435,949
1856.....	1,246,880	243,262	456,494	1,003,623
1857.....	1,373,988	426,171	474,400	947,817
1858.....	1,364,905	323,757	520,098	1,041,148
1859.....	1,413,983	409,688	525,949	1,004,295
1860.....	1,342,992	356,064	494,613	986,928
1861.....	1,384,727	286,711	540,996	1,048,016
1862.....	1,358,116	314,713	524,436	1,043,403
1863.....	1,417,927	352,583	559,160	1,066,374
1864.....	1,426,908	326,640	550,620	1,101,268
Average.....	1,322,112	264,443	513,668	1,057,669

If the cholera year 1855 be excluded in taking the average, the figures would be 1,028,571 Deaths instead of 1,057,669. Next to 1855 the greatest mortality occurred in 1863 and 1864, the years of scarcity, in 1863, indeed, of famine in Hungary; but it is to be observed that in these years the highest comparative mortality was among young children. The Deaths among children were 37,000 above the average, at a time when the total Deaths are not very greatly in excess. On the contrary, in 1855 when the Cholera prevailed, the excessive mortality was among adults although it affected the children to some extent also.

The subjoined table (E) contains the Deaths according to months, the population being classified as before :

[E].—*Austrian Empire: Deaths according to Months.*

Month.	Civil Population.			Military Population.			In the Great Towns.		
	Average in 14 Years.	Daily Average of Month.	Pro- portion p. ct.	1851 to 1864.	Daily Average of Month.	Pro- portion p. ct.	Average of 14 yrs.	Daily Average of Month.	Pro- portion p. ct.
Jan. . .	109,085	3,519	10·0	7,595	245	7·7	2,859	92	8·3
Feb. . .	98,267	3,510	10·0	8,008	286	9·0	2,730	98	8·9
March. .	106,252	3,427	9·8	9,407	303	9·5	2,230	104	9·4
April. .	93,405	3,113	8·9	9,764	325	10·3	3,196	107	9·8
May . .	84,236	2,717	7·7	9,757	315	9·6	3,222	104	9·4
June . .	72,504	2,417	6·9	8,197	273	8·6	2,983	99	8·9
July . .	74,530	2,404	6·8	8,634	279	8·8	2,760	89	8·1
Aug. . .	86,503	2,790	7·9	8,304	268	8·4	2,780	90	8·1
Sept. . .	82,194	2,740	7·8	6,859	213	6·6	2,350	78	7·0
Oct. . .	80,402	2,594	7·4	5,543	179	5·6	2,412	78	7·0
Nov. . .	88,109	2,947	8·4	7,469	249	7·8	2,417	81	7·3
Dec. . .	91,106	2,939	8·4	7,841	253	7·9	2,660	86	7·8

The comparative mortality in the army and in the Great Towns is as nearly as possible the same.

The highest mortality in these two classes occurs in April, which in the army is explained by the new recruits joining at that time, and in the towns by the excessive fatality of consumption, which is much higher among the urban than the rural population.

The highest mortality among the civil population occurs in winter, and is explained by their being badly housed and overcrowded. The mortality in the army and in the great towns is not excessive in winter, on account of the better protection which they have from the elements.

The mortality decreases during the summer months in each case.

The lowest mortality shown is that among the military in September and October, or during the time when they are exercised much in the open air.

The following table (F) contains the births according to months, the population being classified as before :

[F].—*Austrian Empire: Births, 1851-64.*

Month.	Civil Population,			Military Population.			In the Great Towns.		
	Average of 14 Years.	Daily Average of Month.	Pro-portion p. ct.	1851 to 1864.	Daily Average of Month.	Pro-portion p. ct.	Average of 14 Years.	Daily Average of Month.	Pro-portion p. ct.
Jan. . .	184,481	4,886	8.9	1,177	88	8.5	3,252	105	8.4
Feb. . .	128,715	4,418	9.1	1,064	88	8.5	3,153	112	9.0
March. .	181,570	4,244	8.8	1,176	88	8.5	3,424	110	8.8
April. .	122,878	4,089	8.4	1,112	87.7	8.5	2,555	108	8.7
May . .	122,248	3,948	8.2	1,133	86.5	8.2	3,359	105	8.4
June. .	114,768	3,826	7.9	1,085	86.2	8.1	3,110	104	8.4
July . .	120,758	3,895	8.0	1,114	85.9	8.1	3,077	99	7.9
Aug. . .	120,558	3,889	8.0	1,161	87.4	8.4	3,068	99	7.9
Sept. .	120,193	4,006	8.8	1,133	87.6	8.5	3,081	101	8.1
Oct. . .	123,288	3,977	8.2	1,080	83.2	7.5	3,075	99	7.9
Nov. . .	121,113	4,037	8.3	1,174	89.1	8.8	3,117	104	8.4
Dec. . .	118,249	3,814	7.9	1,167	87.8	8.4	3,158	103	8.1

The highest birth-rate is shown in January and February, and the lowest in October. The cause of this can be referred to the season of the year by reckoning back nine months in order to arrive at the date of the conceptions, when it will be found that the most conceptions take place in summer, i.e., in May and June, and the fewest in February, when the cold is the greatest and has lasted the longest.

The last table (G) shows the comparative numbers of the legitimate and illegitimate births, also arranged according to months.

The percentage of illegitimate births throughout the empire is 9.5, but of these by far the greatest number occur in the large towns, for in Vienna the proportion is 50.0, in Prague 47.6, and in Pesth 35.5 per cent. of the total number of births in those cities respectively.

[G].—*Austrian Empire: Legitimate and Illegitimate Births, 1851-64.*

Month.	Legitimate.			Illegitimate.		
	Average of 14 Years.	Daily Average of Month.	Pro-portion p. ct.	Average of 14 Years.	Daily Average of Month.	Pro-portion p. ct.
Jan.	106,162	3,420	8.8	12,756	412	9.3
Feb.	100,758	3,598	9.2	11,957	427	9.7
March	105,849	3,414	8.8	12,390	400	9.0
April	96,861	3,229	8.3	11,418	380	8.6
May	95,180	3,070	7.9	11,581	373	8.4
June.	90,177	3,006	7.7	10,562	353	8.6
July	95,823	3,091	7.9	10,494	339	7.7
Aug.	99,596	3,218	8.2	10,139	327	7.4
Sept.	100,277	3,348	8.6	10,866	345	7.8
Oct.	102,070	3,292	8.4	10,513	340	7.7
Nov.	97,771	3,259	8.4	10,924	364	8.2
Dec.	98,673	3,022	7.8	11,335	365	8.3

The highest birth-rate is the same in both cases as in the general table and takes place in January and February.

The concluding paper is the one communicated by the Ministry of War, and containing the statistics of the losses incurred in the war with Prussia in 1866.

The combatant strength of the army employed against Prussia was 10,932 officers, and 396,291 men; together 407,223.

The total of the Austrian army for the year 1866 was 19,538 officers and 627,098 men; together 646,636.

[H.]—*Combatant Strength of Austrian Army, 1866.*

Kind of Troops.	Officers.	Men.	Total.
Infantry.....	6,686	249,243	255,929
Rifles.....	1,118	42,871	43,989
Border infantry.....	480	16,794	17,274
Heavy cavalry.....	812	7,008	7,820
Light ".....	883	19,807	20,690
Artillery.....	518	22,245	22,768
Hospital corps.....	50	2,880	2,930
Engineers.....	884	11,458	12,342
Military train.....	556	24,485	25,041
Total.....	10,932	396,291	407,223

The number of killed, wounded, and missing of each of the above description of troops is contained in the annexed table:

[I.]—*Austrian Army, 1866: Killed, Wounded and Missing.*

Kind of Troops.	Officers.			Men.			Total.		
	Killed.	Wound'd.	Missing.	Killed.	Wound'd.	Missing.	Killed.	Wound'd.	Missing.
Infantry.....	428	1,188	852	7,997	21,545	32,710	8,425	22,693	33,062
Rifles.....	103	192	49	1,538	3,987	6,281	1,640	4,179	6,280
Tyrolese rifles..	14	23	1	104	412	163	118	435	164
Border infantry	4	22	2	68	328	191	73	350	193
Cuirassiers . . .	10	33	28	143	205	890	158	238	913
Dragoons.....	2	6	—	26	68	66	28	74	66
Hussars.....	8	27	22	127	181	495	180	208	517
Lancers.....	7	21	10	105	202	1,013	112	223	1,023
Artillery.....	17	44	29	292	863	1,331	309	912	1,351
Hospital corps..	—	—	1	1	3	71	1	3	72
Engineers.....	—	—	1	—	3	24	—	3	25
Military train..	—	—	3	1	8	80	1	3	82
Total.....	587	1,505	483	10,407	27,865	43,264	10,994	29,310	43,747

The table below contains the number per 1,000 of the fighting strength of each of the different kinds of troops who were killed, wounded, or missing:

[K.]—*Austrian Army, 1866: Proportion per 1,000 of Casualties.*

Kind of Troops.	Officers.			Men.			Total.		
	Killed.	Wound'd.	Missing.	Killed.	Wound'd.	Missing.	Killed.	Wound'd.	Missing.
Infantry.....	64.0	170.2	52.6	32.1	86.4	131.2	32.9	88.6	129.3
Rifles.....	103.8	191.4	44.7	38.3	102.6	149.1	40.0	104.9	146.6
Border infantry	8.3	45.8	4.2	4.0	19.5	11.4	4.2	20.3	11.2
Heavy cavalry.	32.1	105.8	78.7	21.1	29.2	127.0	21.6	32.5	124.7
Light ".....	13.6	61.2	36.2	13.0	22.8	79.4	13.0	24.4	76.0
Artillery.....	33.1	85.8	39.0	13.1	39.0	59.8	13.6	40.1	59.4
Hospital corps..	—	—	20.0	0.4	1.8	29.8	0.4	1.2	29.6
Engineers.....	—	—	3.0	—	0.3	2.1	—	0.3	2.1
Military train..	—	—	8.6	0.1	0.1	3.3	0.1	0.1	3.3
Total.....	53.7	137.7	44.2	26.3	70.3	109.2	27.0	72.0	107.4

The next and last table contains a list of the losses at the battle of Lissa (July, 1866) on board each ship:

[L].—*Casualties at the Naval Battle of Lissa, July, 1866.*

	Officers.			Men.		Total.		
	Killed.	Wound'd	Missing.	Killed.	Wound'd	Killed.	Wound'd	Missing.
Marines.....	..	..	..	11	16	11	16	..
<i>Iron clads—</i>								
Ferdinand Max .....	..	2	..	1	5	1	7	..
Prince Eugen.....	..	..	..	..	1	..	1	..
Drache	1	1	..	..	5	1	6	..
Salamander .....	..	2	..	..	7	..	9	..
Don Juan .....	..	..	1	1	4	1	4	1
Kaiser Max .....	..	..	..	..	3	..	3	..
<i>Sailing Liners—</i>								
Kaiser.....	1	5	..	17	31	18	36	..
Novara.....	1	2	..	5	49	6	51	..
<i>Screw Frigates—</i>								
Schwarzenburg .....	..	1	..	..	1	..	2	..
Adria .....	..	..	..	..	7	..	7	..
Donau.....	..	..	..	1	2	1	2	..
<i>Paddle Steamer—</i>								
Elizabeth .....	..	..	..	..	5	..	5	..
Total.....	2	13	1	36	136	39	149	1

The foregoing papers and tables have been selected from among a large amount of valuable statistics which have been brought together by the various members of the Central Statistical Commission with no little labor, and for which the members of the Commission deserve the consideration of statisticians in all countries.

It is exceedingly gratifying to find evidence of so much real progress in statistical organization in Austria. There is scarcely a country in Europe in which the immediate and direct value of accurate statistical data will be greater; and looking at the manner in which the Central Commission has hitherto conducted its proceedings, we are justified in expecting from its example and influence the best results.

RAILROAD EARNINGS FOR SEPTEMBER.

The gross earnings of the under-mentioned railroads for the month of September, 1866 and 1867, comparatively, and the difference (increase or decrease) between the two periods, are exhibited in the following statement:

Railroads.	1866.	1867.	Increase.	Decrease.
Atlantic and Great Western.....	\$536,950	\$483,857	\$.....	\$53,093
Chicago and Alton	332,683	431,977	99,294	.....
Chicago and Great Eastern.....	104,546	130,495	25,949	.....
Chicago and Northwestern.....	1,000,066	1,451,284	451,218	.....
Chicago, Rock Island and Pacific	396,049	517,702	121,653	.....
Erie	1,416,101	1,444,745	28,644	.....
Illinois Central	571,348	704,894	133,546	.....
Marietta and Cincinnati.....	104,896	121,177	16,281	.....

Railroads.	1866.	1867.	Increase.	Decr'se
Michigan Central	489,166	464,778	25,517	....
Michigan Southern	429,177	496,408	57,281	....
Milwaukee and Prairie du Chien	179,527	277,830	98,308	....
Milwaukee and St. Paul	380,767	408,658	72,891	....
Ohio and Mississippi	278,701	335,901	77,200	....
Pittsburg, Fort Wayne and Chicago	664,926	685,067	30,143	....
Toledo, Wabash and Western	349,117	363,994	23,879	....
Western Union	84,469	126,496	42,024	....
Total in September	\$7,178,485	\$8,443,865	\$1,270,480	\$.....
Total in August	6,619,650	6,973,228	353,578	....
Total in July	5,997,856	5,754,795	....	213,061
Total in June	6,708,446	5,815,741	....	890,705
Total in May	6,408,297	5,907,650	....	494,637
Total in April	5,473,197	5,812,789	339,591	....
Total in March	5,593,522	5,699,601	44,078	....
Total in February	4,664,525	4,798,978	134,453	....
Total in January	5,573,441	5,413,457	24,986	....
January-September, 9 months	\$53,964,220	\$54,565,083	\$600,743	\$.....

The gross earnings per mile of road operated for the same months of the two years are shown in the table which follows:

Railroads.	Miles of road.		Earnings.		Differ'ce.	
	1866.	1867.	1866.	1867.	Incr.	Dec.
Atlantic & Great Western	507	507	\$1,039	\$964	...	\$85
Chicago and Alton	230	230	1,153	1,507	...	355
Chicago and Great Eastern	224	224	467	583	...	71
Chicago and Northwestern	1,023	1,145	869	1,269	...	800
Chicago, Rock Island & Pacific	410	410	865	1,268	...	397
Erie	798	778	1,774	1,977	...	198
Illinois Central	708	703	307	996	...	186
Marietta and Cincinnati	251	251	419	469	...	68
Michigan Central	285	285	1,506	1,631	...	125
Michigan Southern	524	524	819	928	...	109
Milwaukee & Prairie du Chien	234	234	768	1,267	...	495
Milwaukee and St. Paul	275	275	1,308	1,463	...	265
Ohio and Mississippi	340	340	580	1,046	...	296
Pittsburg, Ft. Wayne and Chicago	468	468	1,220	1,463	...	64
Toledo, Wabash and Western	521	521	670	735	...	65
Western Union	177	177	477	714	...	237
Total in September	7,084	7,124	\$1,030	\$1,186	\$166	\$...
Total in August			941	978	37	....
Total in July			818	808	...	40
Total in June			953	816	...	137
Total in May			912	829	...	83
Total in April			778	816	38	....
Total in March			795	791	...	4
Total in February	7,084	7,124	683	673	10	....
Total in January			764	700	...	4
January-September: 9 months	7,084	7,124	\$7,674	\$7,659	\$	\$151

The tables given above show the approximate earnings of the leading railroads in gross and per mile for the month of September, 1866 and 1867. It will be seen that in 1867 the earnings of all, except of the Atlantic and Great Western, are in excess of those for the corresponding month of the previous year, and of any past month of the current year. The causes of this change for the better are well known, and have received from us sufficient discussion in the late issues of the CHRONICLE. The chief among them, as we have already pointed out, is the large and increasing grain movement in the West; and for the purpose of the further illustration of this movement we have compiled, and here introduce the following statement showing the receipts of flour and grain at the lake ports of Chicago, Milwaukee, Toledo, Detroit and Cleveland, for the

five weeks ending with September 28, and the corresponding weeks of 1866:

	Flour, bbls.	Wheat, bush.	Corn, bush.	Oats, bush.	Barley, bush.	Rye, bush.
Weeks ending						
Aug. 31, 1866	76,741	908,664	1,944,388	223,096	31,373	57,594
Aug. " 1867	108,644	1,364,606	1,016,044	1,001,751	114,643	101,285
Sept. 7, 1866	90,998	742,230	1,502,398	168,358	41,881	92,499
Sept. " 1867	119,714	1,155,387	788,438	532,617	267,723	92,499
Sept. 14, 1866	100,785	892,617	918,443	187,816	41,882	58,126
Sept. " 1867	130,593	1,009,055	969,636	669,080	2 5,139	107,84
Sept. 21, 1866	127,913	1,062,391	708,374	178,880	63,232	68,424
Sept. " 1867	146,110	1,746,005	851,748	783,269	254,414	94,280
Sept. 28, 1866	128,608	1,157,199	462,513	184,919	92,267	33,146
Sept. " 1867	153,605	1,906,958	906,961	897,589	210,794	94,680
Total 5 weeks, 1866	543,290	4,764,201	5,537,015	881,069	271,645	298,294
Total " 1867	663,996	7,671,906	4,094,811	3,629,276	1,223,653	496,140
Decrease 1867			1,502,204			
Increase 1867	120,676	2,907,705		2,748,217	1,061,008	198,126

This statement, however, accounts only for the trade from West to East. The Fall trade of the seaboard cities has created a like freighting movement from East to West. The total result is shown in earnings footing up in gross \$8,448,865 against the earnings in September, 1866, which amounted only to \$7,178,435—making a difference in favor of September, 1867, of \$1,270,430, or 17.69 per cent. Taking the whole mileage operated in the years respectively as the divisor, the quotient for 1866 is \$1,020, and for 1867, \$1,186—difference, \$166 per mile of road.

The results of the third quarter of the current year, compared with those of the corresponding quarter of 1866, are shown in the statement which follows:

Railroads.	Gross earnings.		Earnings p. m.		Difference	
	1866.	1867.	1866.	1867.	Inc.	Dec.
Atlantic and Gt. Western	\$1,513,275	\$1,359,196	\$2,995	\$2,691	\$2.69	\$3.04
Chicago and Alton	1,031,594	1,199,603	8,694	9,899	9.89	8.69
Chicago and Gt. Eastern	297,635	299,779	1,289	2,299	2.29	1.28
Chicago and Northwestern	2,608,094	2,870,423	2,595	4,295	4.29	2.59
Chic., Rock Island and Pacific	1,007,711	1,196,603	2,455	4.00	4.00	2.45
Erie	2,919,745	2,765,081	4,912	4.91	4.91	2.91
Illinois Central	1,680,137	1,683,799	2,909	2.90	2.90	1,680
Marietta and Cincinnati	807,810	842,487	1,226	2.26	2.26	807
Michigan Central	1,112,797	1,176,799	8,907	8.90	8.90	1,112
Michigan Southern	1,153,077	1,228,049	2,196	2.19	2.19	1,153
Milwaukee and P. du Chien	466,588	581,124	1,998	1.99	1.99	466
Milwaukee and St. Paul	746,690	802,094	2,774	2.77	2.77	746
Ohio and Mississippi	831,417	904,066	2,446	2.44	2.44	831
Pittsburg, Ft. Wayne and Chic.	1,855,504	1,891,869	3,965	3.96	3.96	1,855
Toledo, Wabash and Western	1,060,223	1,037,510	3,015	3.01	3.01	1,060
Western Union	290,663	263,263	1,303	1.30	1.30	290
Total 3d quarter	19,765,941	21,176,868	2,310	2,972	2.97	19,765
Total 2d quarter	18,531,860	17,786,129	2,612	2,462	2.46	18,531
Total 1st quarter	18,636,489	15,884,016	2,322	2,225	2.22	18,636
January-September, 3 qrs.	56,934,290	54,855,033	7,975	7,660	7.66	56,934

The improvement in the earnings for the third quarter of 1867 over those of 1866 is \$1,410,947, or 7.14 per cent. being a gain of \$163 per mile of road operated. In the second quarter there is a deficit of \$180 per mile. The first quarter showed a small gain (\$2) per mile. If we take the gross earnings for the nine months, we find a gain in the current year over the previous one of \$580,743. But the earnings of 1867 were made on increased mileage. And hence the amount per mile for

the first three shows a small decrease, the earnings having been for 1866 \$7.675 per mile, and for 1867 \$7.660 per mile, a loss in 1867 of \$15 per mile. This difference will, however, be converted into a gain by the end of October; and there is now every prospect of the current year giving even a larger return of gross earnings than its predecessor. We also anticipate much larger profits to the companies owning these railroad, as no such large sums have been taken from income for improvements, extraordinary repairs or rolling stock, as in previous years, and in many instances a greater economy has been practised in working expenditures. Several of the Western roads, however, received considerable damage by storms and floods in the early months of 1867, which undoubtedly must have used up very large sums in their restoration to a proper working condition.

RAILROAD LEGISLATION.

There is, perhaps, no part of the statute-book, either in Europe or America, which has been subjected of late years to such unceasing tinkering, or which presents so varied and unsatisfactory a condition, as that portion which is devoted to the railroad system—its internal organization, and its relations to the community. There is certainly no part of the duty of legislators in modern communities which is more delicate—no part which requires more knowledge, or a more advanced spirit of progress—than that which relates to this subject; and nowhere can be found a more urgent call for reform. In France, in England, and in the United States—countries of which the several railroad systems are organized on principles diametrically opposed, and varying from the extreme system of governmental protection and control in France, through the whole range of private legislation, to what amounts to almost a free trade in railways in many parts of America—yet in all these countries the same condition of affairs has resulted, and a call for reform is heard; a demand for readjustment of interests on some basis more satisfactory than any which now exists between railroads and their proprietors and the community at large. In France and England this demand has led to the appointment of carefully selected commissions, and to the publication by them of learned and elaborate reports; and, in America, it leads to incessant legislative agitations and never-ending reports of committees, while the Anti-Monopoly Cheap Freight Railway League has recently been organized in New York, with a view to a systematic agitation and reform of the whole subject. It is not proposed in the present paper to enter into any elaborate review of the reports of the European commissions, or of the publications of the American League, but it is proposed to look in the statute-books, and to examine a few of the fundamental principles of our statute law in relation to railroads, as that law now exists, with a view to testing their value, or their accordance with either philosophical principles or the results of experience.

The whole of the existing body of the railroad law, as it stands in the statute-book, is necessarily the growth of the last forty years; yet the

principles now at the basis of that law were distinctly laid down in the crude charters granted about the year 1830. In them also may be clearly read how very vaguely the common-sense legislators of those days appreciated the new power with which they had to deal. Their imagination did not reach beyond a conviction that improved turnpikes were in process of construction; they drew their analogies from stage-coaches rather than steamboats; and the fundamental idea was improvement and not revolution. Thus, in England, the earlier charters granted followed as closely as possible the provisions which had previously been applied to canal companies. In their capacity as owners of the road, the new companies were not intended to have any monopoly or preferential use of the means of communication on their lines of railway; but, on the contrary, provision was uniformly made in the charters to enable all persons, on payment of a certain toll and under certain limitations, to enjoy the use of the road; and it was only when the anticipated improvement had developed into a general revolution that the railway companies, in order to make their undertakings remunerative, were compelled to embark in the business of common carriers, and to conduct the whole operations of their lines of road themselves. In the earliest charters of Massachusetts, likewise, granted in March, 1830, the corporation is authorized to build its road, and to collect tolls from all persons or property conveyed over it; and, to the more efficient collection of the same, it is authorized "to erect toll-houses, establish gates, appoint toll-gatherers, and demand toll upon the road, and to prescribe, by rules and regulations, conditions for the transportation of persons and property, the construction of wheels, the form of cars and carriages, the weight of loads, and all other matters and things in relation to the use of said road;" and it is further prescribed that the road may be used "by any persons who shall comply with such rules and regulations." The road, in fact, existed in the minds of the legislators of both countries, as improved turnpikes, over which, as over all other turnpikes, all persons should have a right of transportation for themselves or their goods, in their own or the company's carriages, and supplying, if need be, their own motive power, upon their compliance with certain rules and regulations.

The legislators of those days were satisfied with these plain, common-sense views, based simply on past experience. They were content to try the experiment, and to let legislation introduce itself as its influence was found to be necessary. To make easy, however, the introduction of such legislation whenever the necessity for it arose, they inserted into the charters various saving and restrictive clauses. Where, as results have shown, legislators were possessed with so wholly inadequate a conception of the interests about which they were legislating, it is at least probable that these temporary provisions made by them will not prove to have been the best possible basis of a system, and, as will be contended, the history of the railroad system has afforded no exception to the rule of probabilities in this case; yet the clauses, of the description referred to, then introduced into those early charters, have, with a few unessential alterations, continued to this day part and parcel of the fundamental railroad law. These restrictive and provisionary clauses will be found to have a strange similarity, whether examined among the Acts of Parliament or under the

appropriate headings in a volume of revised statutes. For instance, in the infancy of the system, the community was naturally anxious to secure itself against unreasonable extortion on the part of those controlling these lines of travel. This could only be done in one of two ways—either by affixing a *maximum* to the “tolls” or charges of the corporation or limiting their profits. The experience of those days afforded no basis for the regulation of “tolls” or charges, and the legislator naturally resorted to the limitation of profits. Accordingly, as early as 1828, in the Act of Parliament establishing the Liverpool and Manchester Railroad Company, there was introduced a provision for a certain abatement of charges whenever the dividends of the Company should exceed a stated percentage, which restrictive clause, the best then possible to form, has since found its way, as a principle, into almost every statute-book of the United States, and still holds its place, with, as will be contended, none but pernicious results. On this principle of legislating against possible future contingencies, Parliament has also reserved to itself the right of purchasing, on specified terms, all railroad lines, after the expiration of a certain period; the power, also, in certain contingencies, of at any time reducing the *maximum* of tolls and rates leviable, as also of passing any general railway act it may deem necessary for regulating the railway system. These very identical principles—a sort of general reserved power of meddling—can be found in many of the statute-books of America; and it is proposed, in the present paper, to examine somewhat carefully into the practical workings and effect of these provisions, with a view of ascertaining what they are really worth and what influence they exert.

For convenience of illustration, the sections of the Massachusetts statute-book providing restrictions and limitations similar to those of the English law above specified, may be taken as an example. Provisions exactly similar in all respects may be found in many other statute-books, while the most objectionable limitation of all, that assigning a *maximum* of profits, is almost universal in America; and the considerations hereafter advanced in this paper, and the conclusions arrived at, will be found applicable to every statute-book in America.

The clauses in question read as follows :

“Each corporation may establish, for its sole benefit, a toll upon all passengers and property conveyed or transported on its road, at such rates as may be determined by the directors thereof; but the Legislature may, from time to time, abate or reduce the rates of toll, according to the provisions, if any, contained in the charter of the corporation; provided that such tolls shall not, without the consent of the corporation, be so reduced as to produce with all profits less than ten per cent. a year.”—Gen. Laws, ch. 68, § 118.

“The Commonwealth may, at any time during the continuation of the charter of any corporation, after the expiration of twenty years from the opening of its road for use, purchase of the corporation its road, and all its franchise, property, rights, and privileges, by paying therefor such sum as will reimburse it the amount of capital paid in, with a net profit thereon of ten per cent. a year from the time of the payment thereof by the stockholders to the time of the purchase.”—Gen. Laws, ch. 68, § 138.

“Every act of incorporation passed after the eleventh day of March, in the year 1831, shall be subject to amendment, alteration, or repeal, at the pleasure of the Legislature.”—Gen. Laws, ch. 68, § 41.

The germs of all these provisions of the General Laws may be found in

the two first railroad charters ever granted in Massachusetts; (Massachusetts Special Laws, 1829, chaps. 94, 95.) and thus the crude legislative make-shifts of forty years ago have gradually passed unchallenged into the general and permanent law of the State. That these conditions and saving clauses go to the very foundation of the contract between the community and the corporation, cannot be denied; and, in any State in which they are in force, they cannot but constitute a leading feature of railroad corporate life. That they were originally scanned with some surprise by the eminent lawyers of Massachusetts may be inferred from an anecdote of that Jere. Mason, who Mr. Webster declared was his master at the law. That gentleman once, in the early days of railroads, upon taking his seat in a car, found himself alone in it with a leading railroad president. Mr. Mason at once called out, "Mr. —, when you get your charters from the Legislature, why don't you get a charter that means something? What makes you sign a blank sheet of paper for the Legislature hereafter to write on it whatever it pleases?" The gentleman addressed replied that he did the best he could, but did not attempt to deny that his charters were, as against the grantor, little more than sheets of unwritten paper. From that day to this, through all the phases of railroad development, these restrictions and provisions have, in some form and to some extent, remained a part of the almost universal railroad law of America—always carefully preserved and incorporated into revision after revision, with apparently a vague idea that in them was to be found some precious palladium of the public welfare. It may fairly be concluded, that, after forty years of experience, the time has come when we can fairly appreciate the value of this time-honored legislation. If its fruits justify it, let it by all means remain a part of the statute law; if, practically, it has proved an empty form and safeguard only in name, but harmless in operation, it may as well encumber the statute book of the future as of the past; if, however, as will be contended, it has not only failed to produce the beneficial results desired, but, when not wholly inoperative, has actually produced pernicious results which could not have been foreseen—if it proves to be of that order of legislation which is incorrect in principle and injurious in operation, wrong both practically and philosophically—it may then become the task of some future legislatures to carefully consider the propriety of placing our railroad legislation on some other and more correct basis.

That the three clauses in question constitute the fundamental railroad legislation of any State in which they are in force is indisputable. By them is prescribed to all builders of railroads their rates of profit, the conditions on which they hold their property, and the degree of hostile authority which can be exercised over them by others. On this very slight basis of public faith has been erected, in great part, the railroad interest as it now exists. There is no pledge of the public faith to any monopoly, either of space or time—no immunity from interference—no perpetuity of possession. The result, it must be conceded, has fully justified the confidence reposed; for the great powers reserved have rarely, if ever, been abused, and great interests have been rendered as sacred by the blank sheets of paper as they could have been by the most carefully worded contract.

Before referring to any examples of the effect of these saving and guard-

ing provisos, as they may be found in the history of railroad development, it will be well to consider what those effects might reasonably be expected to be. Under the operation of the clauses in question, corporations find themselves liable to constant legislative interference, to the deprivation of their roads after a fixed time; and finally, though they may charge such fares and freights as to them they may seem good, they cannot divide more than a given per cent. It would, therefore, most naturally occur to any one considering the probable effect of this legislation, that a time might come when it would be the great interest of certain corporations not to attract public notice or legislative interference by being too prosperous—profits might become “painfully large.” The result of such a position of affairs is apparent as it would be disastrous; that in more than one instance it has already sprung from the operation of the clauses in question, will be shown hereafter. The moment a railroad corporation earns more money than it can safely divide, it ceases to care to do anything calculated to increase its receipts; it loses its great bond of public sympathy, and becomes merely a private, dividend-paying corporation. Such a result was never contemplated by any Legislature. The analogy of highways interfered with their distinctness of vision. If a turnpike earned more tolls than it could legally divide, it was none the less open to the whole world, and whoever would pay for its use was free to use it. Whatever quantity of blood might flow through it, the artery could not be closed, nor could the volume of circulation be compressed. That railroads were to be arteries of the body politic, that they had a duty to perform to the community no less than to their proprietors, were ideas fixed firmly enough in the minds of the legislators of 1829; but that it could ever be in their power, as well as become their interest, to block up their own traffic, and reduce their own receipts, was a contingency not foreseen. Unfortunately, the legislation of (forty years ago) that time, though the most prudent which could be devised in the then existing state of knowledge, has, by remaining too long in the statute book, not only tended directly to that result, but, where not corrected by the influence of active competition, has led to that result in exactly its most disastrous form. For, as the railroad system developed itself, travel became divided into two kinds,—the local travel and the through travel. On the first depended what may be called the internal or absolute prosperity of each given community; on the latter, its external or relative importance. The internal and local traffic of Massachusetts, for instance, must depend on the conveniences afforded by its railroad system to its local trade; its relative importance to the whole external world must, in great degree, depend on the facilities and conveniences it affords for through travel in comparison with other communities. Certain great lines of railroad in every system, those known as its through lines, will always, therefore, be of great importance, and probably the most profitable. On these lines, their management and spirit, must in great degree depend the external communications, and the relative importance of each railroad system and of each railroad centre. In these days of intense activity and eager competition, it is, therefore, of the first importance to every growing community that the through lines of its railroad system should afford every facility for traffic, and should themselves be impelled by the utmost eagerness to extend their operations, and to

increase their volume of receipts. Unfortunately, the obvious and necessary operation of statutes like those now in force in Massachusetts is to bring these railroads, in the absence of competition, first of all into the paradoxical position where profits become painfully large. The railroad continues the main artery on which much of the prosperity and much of the relative importance of the community depends; but it gradually becomes the interest of the proprietor of that artery to apply some mild obstruction, with a view of checking the increase, if not diminishing the volume, of the circulation. Neither, in such case, can any fault properly be found with the management of the corporation. Its officers represent stockholders, and not the community. The community is represented by the Legislature; and, in conferring its charter upon the corporation, it inserted such provisos for its own protection as seemed to it sufficient. Acting within those provisos, and fulfilling all conditions prescribed by the community, through its representatives, for its own protection, it is difficult to see what more the officers of the corporation have to do than to guard the interests of the proprietors.

The chief tendency of a clause limiting profits would therefore seem to be, in many cases, and more especially in those on which the essential growth of the community depends, to bring into direct antagonism the interests of the community and corporation,—to put a period to the instinct of growth in the latter. In cases where this un contemplated result is not reached, it is difficult to see what operation the clause in question could have; and the natural tendency of the first of the three clauses under consideration would seem, therefore, to be always useless and often pernicious.

There remain two other clauses to be criticised,—the one prescribing the terms on which the right of the community to purchase the road shall be exercised, and the other authorizing any degree of legislative change in the conditions of the charter. The advantage secured to the State by the clause first referred to, is difficult to appreciate. If the State wishes to take possession of any railroad within its limits, it has undoubted right to do so, with or without the statute in question, which would seem simply to prescribe conditions to the exercise of the right of eminent domain. While the expediency of prescribing such conditions may fairly be questioned, the legality of so doing is not above all suspicion. That a legislature cannot bind future legislatures in the exercise of the power of eminent domain is well established law. If its exercise cannot be prohibited, it is difficult to see how it can be conditioned. If one condition upon that exercise could be imposed, others could also, and future legislatures could be deprived of a power essential to the community, by an accumulation of conditions, each one reasonable in itself. Such a dangerous limitation of the power of eminent domain is not likely for ever to pass unchallenged. But, however it may be with its legality, its expediency is certainly not above question. The cause of the insertion of this clause into the charters of forty years ago it is not now difficult to appreciate. The enterprises then set on foot were great and uncertain,—requiring a present outlay of capital, with an indefinite prospect of return. That return might be great and immediate, and the community was then thought to be sufficiently protected against excessive corporate profits by the insertion of the ten per cent. limit clause; or, on the other hand, it might be great

and remote, and, legislating for a distant future, the investor was insured against the appropriation of his property by the State at a time when, at last, it might have become valuable, by the assurance of a handsome profit before the law of eminent domain should be applied. All was then as vague and unsettled as it is now defined and established. Under these circumstances, the continuation in force, after this lapse of time, of this crude provision of the statute law seems advantageous neither to the corporation nor to the community. It may fairly be asked, why should railroad corporations now be distinguished by the insertion of this clause in their charters from all other corporations empowered to hold real estate? The right of eminent domain is of universal application. It applies to the property of private persons, no less than to that of canals, bridges, turnpikes, municipalities, water powers and manufactories; to all equally with railroads. To none, except the last, does the community insure a fixed profit on their investment, without payment of which its power shall not be exercised. In regard to all, one uniform law prevails—the simple law of compensation on the exercise of the power. No satisfactory reason can now be adduced why the same rule should not obtain in relation to railroads. That the clause in question would, by fixing in advance a price to be paid, aid the community in obtaining possession of the roads, is to the last degree unlikely. The English Commissioners report of the similar provisions of the English law, that “it would no doubt have been easier to treat” for the purchase of the roads “without any special law, than with the condition which the act imposes.” (Royal Commission on Railways, Report, 1867, cl. 75.) However this may be, if the property of a railroad corporation has increased immensely in value since the construction of their road, as has generally been the case, and the corporation has uniformly paid its dividends of ten per cent., as very few of them have, it is manifestly unjust that the State should now appropriate its property on repayment to the stockholders of the amount of their paid-in capital, which might well represent one-third, perhaps, of the existing value of the road. On the other hand, if any revolution in the railroad system made it imperative in the community to own any or all of the lines within its control, it is impossible to suppose that the right of eminent domain could be limited, and the community forced to pay to depreciated roads enormous arrears of profits which they had never earned, and the value of which their roads in no way represented. Justice to the community and justice to corporations alike require that, in such cases, the ordinary rule of compensation should apply. Such would seem to be the theoretical working of this exception to the universal law of eminent domain.

It now only remains to consider the last of the three general clauses specified—that which reserves to the legislatures a general right of alteration, amendment, and repeal over all charters granted by them, and which, of course, includes all charters granted to railroads. Few will be found to object to this clause as part of the general statute law of a State; the only question is as to its special applications. The same provision is in force in Maine; but every important railroad charter granted in that State specially provides that this reserved legislative power shall not apply to the road thereby incorporated. In the early days of the railroad system, the existence of such a proviso may have been necessary to guard

the community against the exactions and insolence of corporations; it can only be said that similar provisions have not been found necessary in many of the Western States. At present, however, the only tendency of the clause in question is, by reducing the railroad charters to blank sheets of paper, to cause continual appeals to legislatures and an ever-increased tendency to legislative meddling. In a subsequent part of this paper, some considerations will be adduced why a clause of this description should no longer find a place in any well considered railroad charter.

It is now proposed to give one or two historical examples of the operation of these clauses, hitherto discussed only in their probabilities. It is not maintained that all the results to be described are to be entirely referred to the operation of the clauses in question. Among the myriads of influences always at work, cause and effect cannot thus be legalized, and possibly the statute provisions in question may have been among the influences least potent in producing some of the results to be described. If, however, it should appear that, in certain localities where these statute provisions are in force, such results have manifested themselves as theoretically might have been anticipated from the operation of the provisions in question, it seems only fair to presume that those provisions had some perceptible influence in producing these results.

As the provisions of the Massachusetts statute-book have been cited, the example of the operation of those provisions can best be taken from the railroad history of that State. In 1831, the Legislature of Massachusetts incorporated the Boston and Worcester Railroad Corporation, and the charter of the company contained the clauses of purchase by the State, and limitation of profits, now in force. In 1833, the Western Railroad Corporation was chartered with similar condition and limitations. The general statutory clause reserving to the Legislature the power to amend, alter, or repeal all charters thereafter granted had then been already two years in force. The completion of the roads so chartered, at last opened to Massachusetts a direct communication with the West. Meanwhile other through lines had been constructed, of hardly less importance to the railroad system of the State. Chief among these was the Boston and Providence Railroad Corporation, chartered with a view of forming, by means of Long Island Sound, through steam communication between New York and Boston. These three corporations, the Boston and Worcester, the Boston and Providence, and the Western, have all been sufficiently prosperous to be brought in conflict with the statute clause for limitation of profits. Other roads might easily be named, which have been equally prosperous, and with similar results; but all the lines referred to were constructed as through lines, and it would be useless to multiply examples. The fact is that, in the history of each of the roads referred to, a time did come when their traffic became inconveniently large and dangerously profitable. With the Boston and Providence road this was to the community a matter of little moment—the road was well managed, and, more than all, it was, for its through travel, open to active competition, which in this case, if it cannot make a wrong principle right, at least prevents it from producing its full pernicious results. Though the fact that the Massachusetts community did not have to rely on this line, and this line alone, for its steam communication with New York, made the operation

of the statute in question unimportant in this case, yet that its whole tendency was most injurious to the community was very manifest. As an evidence of this, one incident can be taken from the history of the corporation. Early in the present year it was proposed to renew the steamboat connection between Boston and New York by way of Providence, and a line of steamers was established, which promised to add greatly to the traffic and revenues of the Boston and Providence Railroad. The corporation owning the steamers in question being embarrassed, asked of the Boston and Providence road a loan of its credit, offering therefor satisfactory security. It became necessary to refer the matter to a meeting of the stockholders of the road in question. At a meeting held in the spring of the present year, the expediency of loaning their credit as desired was strongly urged on the stockholders by the officers of the corporation, and the matter left for their decision. The measure, though carried by a large majority of votes, was vigorously opposed, and opposed most vigorously on the very ground of the existence of the proviso in question. It was publicly and repeatedly urged that the road was doing as well as it safely could do, that it was earning and dividing ten per cent. per annum, that the law would not permit it to divide more, and that to earn more would be to attract the attention and hostile action of the Legislature. In other words, the time-honored and carefully guarded legislation intended to protect the interests of the community was used as a powerful weapon against a natural business development, from which the community could derive good alone, and which was a part of the natural growth of that system on which the prosperity of that community depended.

In the history of the Western and Boston and Worcester Corporations, the evidence of the unfortunate influence resulting from the operation of the statute in question is more distinct. These roads have unfortunately been free from all dangerous competition between Boston and the West, and were accordingly left, undisturbed by outside pressure, a perfect subject for the operation of statutes, rendering the tenure of property insecure and limiting its profits. Few will be disposed to speak well of the results; but they speak very clearly for themselves. At the end of thirty years of successful operation, and a long succession of ten per cent. dividends, these roads found themselves with their stock at forty per cent. premium, and with large reserve funds on hands, waiting to be conveyed, somehow and in some form least likely to attract legislative notice, into the pockets of shareholders. The management of the roads had been in the meanwhile what is commonly called strictly conservative: change had been regarded with jealousy, and but little advantage had been seen to induce to a further outlay of money or exertion of enterprise. A few short extracts from public documents might illustrate this proposition. It appears from the report of a joint special committee of the Massachusetts Legislature of 1866, that so great was the indifference of the managers of one of these roads as to the increase of their western or through business, that, through a period of nineteen years, the increase of local freight was more than equal to the whole increase of its rolling stock; and yet, during nine of these years, while the two great competing lines of a neighboring State increased their through tonnage, one of them four hundred per cent. and the other three hundred per cent., the road in question increased theirs

sixty-two per cent. (Massachusetts House Docs., 1866, No. 330, p. 4.) Under these circumstances, a similar legislative committee of the succeeding year might not unnaturally report, while attempting to exonerate this road at the expense of the other, that "while no roads could be better managed than these, so far as concerns all the interests of the stockholders, yet that the just demands of the public are not, and, while the present state of things exist, cannot, be met and satisfied." (Massachusetts House Docs., 1867, No. 181, p. 5.) It is almost painful to turn from the contemplation of such moral and physical corporate calm to a consideration of the less satisfactory condition of the community, of that community which had so carefully guarded its own rights, so carefully reserved to itself a hold over private property, and carefully secured itself against paying excessive profits to private capital. Again the story is best told by extracts from official documents. "The committee were not only surprised, but amazed, by the multitude of complaints made by business men, and the large and increasing number of merchants who refuse to employ the roads (in question) because of the want of accommodation, and the high tariff charged, but prefer to send their freights by very indirect routes, the same being more economical both in time and money. . . . In addition to individual complaints, the committee found that the roads have not fostered enterprise, and invited employment, but have only increased their tonnage, and enlarged their capacity, when compelled by the demands of an already accumulated business; that they have not anticipated and provided for a growing traffic, that they might realize large or surplus profits, but have waited rather for surplus profits to enable them to make a few improvements." (City Documents, Boston, 1867, No. 22, p. 4.) In other words, after thirty years of development, both internal and external; after thirty years of constantly diminishing relative importance; after thirty years of curiously obstructed growth—the principles of untrammelled enterprise had vindicated themselves; and the too prudent community, which thought to protect itself by violating them, finds itself connected with the whole great West by a railroad of a single track, finds the Hudson only just bridged over, and its single channel of direct trade between the rest of that continent of which it is a part and the whole foreign world unprovided either with a grain elevator or with access to deep water. For years the interests of community and corporations have been clashing; for years the one has been petitioning and protesting, and the other has been promising and postponing. The long struggle has well illustrated both the value of possession as matter of law, and the power of great corporations as matter of fact. For those corporations to increase their traffic without increasing their profits, was not, from the dividend-paying point of view, desirable; to increase their profits without attracting hostile legislation was scarcely possible; those profits, as evidenced in constantly increasing surplus funds, were already dangerously large. Accordingly, the blank sheet of paper, called a charter, carried the day against the angry remonstrances of a whole business community, and the corporations went on, and seem likely still to go on, until either the whole statute basis of their corporate existence is changed, or until active competition shall lend to them that healthy impetus which the desire of gain cannot now impart, more in the spirit which would be

looked for in an Italian or Spanish corporation than in one of New England. For this result, let it again be repeated, the corporations are not responsible. They have fulfilled their contract; only, by the terms of that contract, the community, at a certain point of their development, not only deprived them of every incentive to growth, but made growth absolutely dangerous to them. Neither men nor corporations will labor of their own free will, that others may enjoy all the fruits of their labor; and, while the *sic vos non vobis* principle is rigorously applied to railroad enterprises, who can blame them if they practically reply to all remonstrances and appeals with a placid *Cui bono?* Corporations, like men, will labor unceasingly, and incessantly develop under the impetus either of necessity or gain; but to suppose, when absence of all competition deprives them of the first impulse, and force of law destroys the second, that an abstract love of the general prosperity will induce corporations, any more than men, to do double or fourfold the labor necessarily required to earn a given profit, requires an absence of common sense hardly to be found outside of the statute book.

If any weight is due to the considerations and examples which have now been advanced, it cannot well be denied that the existing railroad system, in so far as it is anywhere founded on a basis of statute law similar to that criticised, is placed in a position towards the community radically wrong. Legislative provisions, intended only for an early stage of transition, have grown into permanency; conditions adapted only to the infancy of a system remain to hamper its maturity. If the principles at the foundation of existing legislation are thus crude and unsatisfactory, either useless or pernicious, it remains only further to inquire what might now, viewed in the light of these forty years of experience, be considered as principles philosophically correct. The problem is not without its difficulty; for it is nothing less than the reconciliation of two sets of interests, now apparently wholly antagonistic—on the one hand, the railroad corporations, of which the aim naturally is to do just that amount of business, on exactly those terms, which will produce a required net profit; on the other hand, the community, whose interest lies in the greatest possible amount of traffic done at the least possible price. As yet the railroad systems of the various countries have none of them more than just entered the early stages of that period of transition which precedes maturity; and almost the first indications are wanting, as to what the ultimate phase of development may be. Such indications as are now afforded would seem to point at some indefinite future, to a system of public, central, and through routes, operated by or for the community at cost only, or very little more; but combined with elaborate networks of local and private branches, worked more or less in the mode of the existing system. It is proposed, in what remains of the present paper, simply to discuss what might be considered correct principles of legislation, on which might be brought into accord the interests of communities and corporations, and the natural development of each promoted; nor are the corporations or the communities to be discussed in any spirit of vituperation, but simply as they now exist, and probably must exist for many years to come. At the foundation of the existing Anglo-Saxon railroad system is the principle of corporate life, and from this immediately springs the conflict of public

and private interests. The simple object of the legislator, it is suggested, should be to reconcile these interests if possible, and to establish the railroad law on such a basis as will tend to the greatest possible development, both public and private.

As has already been sufficiently pointed out, the fundamental principles of most of the existing railroad legislation are insecurity to private, corporate property—uniformity of legislation for all the different members of a most complicated and diverse system—and, finally, a limitation of profits. It is now further contended that, in the existing state of our knowledge and of the railroad system, a code of railroad legislation, philosophically correct, and seeking to combine both private and public development, must be founded on principles the direct opposite of all those mentioned. The clauses containing the principles referred to were framed to guard against possible developments, and to preserve public interests from possible dangers. Forty years of experience have now done something to enlighten us as to the extent of those developments and the reality of those dangers. The whole body of railroad statistics has been created within that time. We now know, what could not have been known in 1830, for how much any road can be built, and what traffic it may expect to have when built; we know what fares and freights should be charged, and how they can best be collected; we know how large a proportion net earnings should bear to gross earnings, what will be the cost of original travel and traffic, and what proportion of additional expense is incurred by increased business. All these facts, and the myriad similar results of railroad returns, were unknown when the originals of the present charters were conferred. In these days Legislatures can do what was impossible in 1830. They can almost cast the horoscope of railroad enterprises; they can, if they see fit, tell from the very commencement where, and in how far, the interests of corporations and communities will clash, and in how far each needs to be restrained. This vast increase of knowledge should, it would seem, long since have revolutionized the railroad charters, and yet the old forms are still re-enacted year after year.

In the first place, in regard to security of property—why should not corporations now have a reasonable assurance against legislative meddling? Why should legislatures still insist on granting for charters only Mr. Mason's unwritten sheets of paper? Such caution was very well forty years ago, but experience has fully developed its worth and its meaning. Any respectable legislative committee, any body of railroad commissioners, should be able to draw up a charter which should run for twenty years, and which should yet specially reserve to legislatures only those few simple powers, apart from police and *eminent domain*, the exercise of which experience has shown not to be mischievous. These few exceptions noted—and they would be found to be very few—it is difficult to see why charters should not be granted which would insure corporations against legislative meddling during the period for which they were expressed to run. The change proposed would at once supply the mode of investment with that complete security which is the first thought of the capitalist. The principle of individual charter and contract once established, other and far more important results must necessarily follow; for, in the second place, the existing system is universal in application. Under it, by operation of general

laws, the same rule is made to apply to all railroads indiscriminately—to the through line and the local line; to the road across the prairies, the road over the mountains, or that between great cities and through manufacturing districts. No attention is paid to either facts of geography or facts of the census, to the needs of the community or the traffic in contemplation, to the cost of construction or the cost of operation. The result is that this system of legislation of necessity must, and always will, make its pressure felt just where that pressure most affects the community. It always must check the development of those lines, of which the very development shows the growth and increased requirements of the community. If this be so, it is essentially wrong. The necessity of leaving railroads in private hands as a source of profit is, at best, a necessary evil—an evil far greater than was that system of turnpikes which only of late years became insupportable, and gave way to a system of free roads. That necessary evil, however, compels us to job out, as it were, in some way into private hands a monopoly of that travel and traffic on which depends the whole material and social development of the day. The only question in the case is as to the terms on which the contract in such cases is to be made—the consideration to be paid, and the benefit to be received. This question brings the discussion at once to the third principle of existing legislation, on which all others depend, and only in connection with which can they be properly discussed.

The fundamental error of the whole system of legislation referred to has been the effort to protect the community by establishing a *maximum* of railroad profits instead of *maximum* of railroad charges. The dividends of stockholders have been regulated, and not the tariff of fares and freights; accordingly profits have depended, not on the amount of work done, but on the amount received for such as was done. The regulation of this matter was impossible forty years ago. How utterly futile all attempts at legislating on such a basis then were, will be sufficiently illustrated by an example taken from early English railway history. When, in 1823, Parliament incorporated the first of steam railroad lines, from the collieries of Darlington to the port of Stockton-on-Tees, certain parties interested in rival ports, and anxious to check the use of the line for conveying coals for shipping, and to confine it to inland traffic, procured the insertion of a clause into the charter limiting the charge for the haulage of coal to Stockton, for shipping, to one half-penny per ton per mile, while four pence per ton per mile was allowed for haulage for the inland trade. It was universally supposed that it would be impossible to carry coals at such a low rate without loss; but this rate not only turned out profitable, but formed, ultimately, the vital element in the success of the railway. Similar absurd results must have been entailed by every attempt at permanent legislation at that time. Legislators, therefore, most properly declined to commit themselves, and left the whole subject open. Now, however, all this is changed; and here, at last, may perhaps be found a substantial, philosophical basis of railroad legislation—a basis of explicit, binding, individual contract.

Every man who knows anything of railroad history knows that the development of that system has evolved certain laws of healthy existence. Railroads are constructed with definite ends in view, and to accommodate

definite classes of traffic. One enterprise looks chiefly to freight, another to passengers, a third to both combined; one is to accommodate local and another through wants; one is built through costly lands, and over deep rivers, or through lofty mountains, and another is laid between great cities, or across a flat country: each demands a system and conditions of its own. Recognising this preliminary fact, legislators and corporations should meet as fair contracting parties. On the one hand, the corporation requests a charter which shall be a binding contract for a given term of years; and, on the other, the Legislature grants such a charter, expressing fully its own conditions. The corporation agrees to do all the business of the community over the individual line proposed, whether through or local, at a specified tariff of rates; and, on these terms, the community insures the corporation against interference for a given number of years. The germ of the correct system, so far as a limit assigned to charges rather than to profits is concerned, is by no means uncommon in the statute-books of America; but it is almost invariably a part of the general legislation, and most vaguely expressed. In the State of Pennsylvania the statute reads as follows, after empowering the company to establish such rates of toll or other compensation as to the president and directors shall seem reasonable:

"Provided, however, nevertheless, that said rates of toll or motive power charges so to be established, demanded, or received, when the cars used for such conveyance or transportation are owned or furnished by others, shall not exceed two and one-half cents per mile for each passenger, three cents per mile for each ton of two thousand pounds of freight, three cents per mile for each passenger or baggage car, and two cents per mile for each burden or freight car, every four wheels being computed a car; and, in the transportation of passengers, no charge shall be made to exceed three cents per mile for through passengers, and three and one-half cents per mile for way passengers."—Purdon's Digest, p. 840, § 20.

In other States the two principles of assigning a maximum to charges and at the same time limiting profits are found side by side. Such is the case in New York. In that State the provisions already quoted from the Statute Book of Massachusetts are all in force, with the exception of the ten per cent. purchase clause, together with an additional provision that upon the roads of that State "compensation for any passenger and his ordinary baggage shall not exceed three cents a mile." The New York Central Railroad forms again an exception to this last rule, as by its organic act of consolidation it is provided that this road shall not charge for travel more than two cents a mile. This exception perfectly illustrates the crudeness of the existing legislation on this subject, and its utter disregard not less of the evidence of figures than of the teaching of experience. The New York Central is one of the most important lines, both through and local, of the whole country, and the travel upon it is either wholly inadequate or is regulated by a simple rule which pays no attention to the first principles of railroad economy—a rule which makes no discrimination as to speed or distance, which sets no value on time, and has no regard for local convenience. It is a perfectly well-established law of railroad economics, which is too frequently lost sight of by railroad reformers both at home and abroad, that speed is of the essence of railroad contracts. The rule may be stated as follows—The cost of moving

increases as the square of the velocity. Thus a speed of forty miles an hour would be four times as expensive as a speed of twenty miles, and a speed of twenty miles four times as expensive as one of ten. This fundamental principle, the basis of all European regulations, is never regarded in America. In England the average fare is higher than in France, and the average speed is greater. The Englishman, again, who travels express pays for his time, while "parliamentary" trains, so called, are provided for the poor and those who desire a slow speed at a low cost. In France, when the railroad reformers three years ago called attention to the greater average speed attained on the English lines, the director-general of the French railroads called their attention in his speech in the Corps Legislatif to the lower tariffs of the French lines, and pointedly declared that the figures of the returns proved that the reformers did indeed wish for speed, but they did not care to pay for it. Much of the American legislation stipulates for price without discrimination of speed—it in fact establishes travel on the one price system. Accordingly, if two cents a mile (which in the currency of the day may be equivalent to two farthings sterling) is a paying rate of fare for travel by express trains at thirty miles an hour on the N. Y. Central road, then, according to the rule of speed and just stated, the case of the extreme English and American railroad reformers would seem to be made out, and, at fifteen miles an hour, the same road should be able to transport passengers at less than half a cent a mile or two miles for an English farthing. If, however, as is still maintained by many, the cheapest and the slowest travel which a country no more populated than central New York can support, must, to be remunerative, return in the currency of the day at least one cent a mile, it then becomes easy to calculate how severe a burden all rapid travel must now impose on the New York Central. In any case, however, the imposing of such a condition upon charges of travel as that referred to can only result in loss and inconvenience to both corporation and community. The corporation cannot accommodate the community with slow local travel at at very low rates, because it must earn its dividends by always charging the legal average—nor will it run lightning trains for those whose time is precious, for, under the restriction of price, such trains can only net a loss. The only correct inference to be drawn from this is that legislation is worse than nothing unless it recognises facts as they exist. The fault in the case does not lie in the principle of contract regulation of traffic or in the efficacy of restriction, it lies in declaring that things radically different are just alike, and in resolutely ignoring both the results of time and the conclusions of science.

While, right or wrong in principle, the statute books of America are uniformly simple—in England, on the other hand, the system based upon limiting charges expended through long years into a mass of legislation, half public, half private, based on no principle and no knowledge, and finally culminating, after the manner of the English, in a multiplicity of conflicting acts, and a confusion worse confounded. For instance, by the charter of the Lancaster and Carlisle Railway, passed in 1844, and resembling, at great length, the old toll-boards of the turnpikes, it was minutely set forth that a "horse, mule, or ass" should not be charged at more than three pence per mile, nor a calf or pig, "or other small animal," at more

than a penny; and so on through an interminable list, beginning with "dung, compost, and all sorts of manure," and ending with "passengers and animals." The charter of this road, by the way, consisted of three hundred and eighty-one distinct clauses; and the commission of 1867 reports that, in addition to the acts of universal application, "the powers of the railway companies and the consequent rights of the public are now, scattered through three thousand one hundred acts of Parliament," and are exceedingly difficult of ascertainment. (Royal Commission on Railways. Report, 1867, § 95.) The more recent parliamentary legislation is based upon tables and a system, and is constantly approximating to correct principles. In France, the policy of the Government is not to assign a maximum of charges, but to establish fixed charges, from which all deviation is prohibited. Though even there by the side of a fixed tariff at a low rate of speed, there exists always another tariff with higher charges and a stipulated delay. The Imperial Commissioner of 1864, however, arrived in his report at conclusions strangely favoring special or discriminating rates, like the individual contracts here proposed, as the best means of developing the resources of the country. America, however, seems wholly to have ignored the results of European investigation and experience. That experience points emphatically to traffic acts but traffic acts should be divided into two parts, quite distinct—that portion which is of general applicability, and that portion which requires adaptation to particular circumstances. To the second portion, especially in America, belongs the tariff of charges. The first portion can be placed on the statute-book, in the form of a general act; but the second portion can only be reduced to general principles, which should find their place, *mutatis mutandis*, in the several charters. The only objection which could be found to this system would be its lack of uniformity. To this objection it would seem to be an obvious answer that the utmost possible lack of uniformity, provided it be based on a system, would be a better order itself, compared with that fierce chaos which now exists, while every railroad establishes and enforces its own law.

Under the system proposed, the relative position of the parties would in all probability, at once be changed. With the corporations working at a fair, living rate of profit, not difficult of ascertainment, the now often hostile interest of community and stockholder would be reconciled, and complete development would be the interest of both. In such case, the greatest amount of service rendered would insure the largest dividends paid, and dividends of a hundred per cent a year would only represent to a community the enterprise of its own servants, and the growth of its own wealth.

But one question would remain to be provided for,—the question of the renewal of charters. Possession or control of the roads by the community would naturally be referred back, where it belongs, to the law of eminent domain. For the expiration and renewal of charters, provision could as easily be made as it now is for the expiration and renewal of copyrights. In fact, a provision could be introduced into every charter for its renewal, based on the law of ten per cent. profit. If, upon the expiration of any charter, the State should not see fit to purchase the road of its owners at a fair estimate of what it would cost to replace it in its existing condition,

without including, of course, the value of any franchise, it might then stipulate to renew the charter for a further specified period, on such terms and conditions as should be fairly estimated would not reduce the dividends below ten per cent. per annum.

Of the remainder of the railroad legislation, as it stands upon the statute books of this country, little need be said. It has mostly been the growth of time and necessity, and not unfairly represents the needs of the community. In any case, with the exception of the three provisions criticised in this paper, it stands apart from the reforms proposed. Striking out these three provisions, the whole of the remaining, existing, railroad laws could, with a few verbal alterations and omissions, be incorporated into future charters by the usual clause of reference. A large portion of the lines required at present, in the older portion of this country, are already chartered and constructed. It would, therefore only remain to substitute, as fast as possible, new charters for the old, as soon as the currency is restored to such a basis as will enable any contracting parties to enter into any agreement which is not more or less a gambling compact. Many of the existing charters already have expired, or soon will do so; but it is hardly probable that any road shrewdly managed would decline to surrender its blank sheet of paper, and receive in its place a binding charter, when its so doing would seem to be so evidently both for its own interest and for that of the community.

THE SCHOLARS AND THE PHILISTINES IN POLITICAL ECONOMY.

BY CHARLES H. CARROLL.

There is a sensible article in the *Nation* of 12th September, under the caption of "A Plea for the Uncultivated," from a correspondent who signs himself "A Philistine," which he explains to be Matthew Arnold's pseudonyme for the man of affairs—merchant, manufacturer, tradesman, artisan—whose pursuits and aims preclude high intellectual culture, as distinguished from the scholar. This Philistine maintains that the scholar falls short of the requirements of society, inasmuch as he is unable to apply his mind usefully in the direction of practical matters. "Ask him," says "Philistine," "what a dollar is and he can only tell you it is a coin. Its function, its power, the intricate yet simple laws which govern its use among men, are to him as Greek to the Philistine. Yet mistakes as to the nature of the dollar have ruined nations and almost stopped the march of civilization."

This incompetency of the scholar the *Nation* denies, and supports the denial by a list of scholars who have been the chief contributors to economical science, to which it says "the practical men" have contributed nothing. Admitting the *Nation's* statement as to the practical men to be true—and it must be generally so admitted—the question follows: What have the men of literary training done for economical science? It strikes me they have made a muddle of it. So far as their teaching is concerned, it scarcely deserves the name of a science. They not only dis-

agree as to many or most of its fundamental principles, but they misunderstand each other unaccountably. "Scholars who have sucked in Latin with their mother's milk," and made the study of language the chief discipline of their minds, seem incompetent to comprehend the language of each other when applied to political economy. For example, Buckle, who quotes authorities enough in various languages to appal an ordinary thinker with his apparent scholarship and gigantic power of comprehension, referring to the discoveries of Adam Smith in political economy, and praising him and his "Wealth of Nations" without stint, remarks—"When it was once clearly understood that gold and silver are not wealth, but are merely the representative of wealth; when men began to see that wealth itself solely consists of the value which skill and labor can add to the raw material, and that money is of no possible use to a nation except to measure and circulate their riches; when these great truths were recognised, all the old notions of the balance of trade, and the supreme importance of the precious metals, fell to the ground."

It would be difficult to crowd more error into so few words as are contained in this sentence. Adam Smith, to whom Buckle attributes the discovery that money is not wealth, expressly repudiates any such idea or any such teaching. He says—"It would be too ridiculous to go about seriously to prove that wealth does not consist in money, or in gold and silver." And who or where is the "man of affairs" that does not know the gold in his inventory, whether coined or uncoined, to be wealth, as much as the iron or wheat or anything else included therein. As to the use of money, no one cares what it is so that money is an object of commerce which commands value in exchange. No other commodity answers this requirement so precisely, promptly, and universally, as money. Value in use does not necessarily enter into consideration with respect to any commodity in the mind of a trader. Value in exchange is all that concerns him; if his commodity possesses this, intrinsically, as a final recompense, it is wealth; and, if he offers it in traffic or employs it in production it is capital, no matter what may be its absolute utility or value in use. Moreover, skill and labor are not the sole sources of value: nature co-operates with influence of soil and climate, and supplies more and better fruits and, of course, more value, with the same amount of skill and labor in one place than in another. It is the pet theory of Bastiat, another scholar, that nature works gratuitously and man cannot take pay for her service. He says she creates utility but not value—an unfounded quibble that Buckle accepts as science. Then the old heresy of the balance of trade, absurd as it undoubtedly is, seems to be yet as fresh and strong as ever; and the notion of the supreme importance of the precious metals has not fallen to the ground, but, on the contrary, attracts labor and enterprise as strongly now as ever, and it will grow yet stronger as men of business supplant the scholars in attention to economical science. In short there is not an idea in the above extract from Buckle that is, according to my apprehension, scientific truth.

The supreme importance of the precious metals is a truth fixed by the universal consent and opinion of the commercial world. Everything offered for sale in any part of the globe makes a demand for money. The seller of every other commodity must seek the particular customer who

deals in it, or wants it for special use, and he is sometimes far to seek and slow to find; but the seller of money finds a customer in the first man he meets who has any other commodity or any service to dispose of. The demand for everything else is limited and special; the demand for money is unlimited and universal. Hence the supreme importance of the precious metals, and hence Buckle's "great truths" are great nonsense, which only a scholar or a theorist would be likely to present or endorse as facts of economical science.

Gold and silver are not representatives of wealth; they represent nothing but themselves; they are substantial *value*, the product of labor and capital, which fluctuates in the market, exchanges for more of other things to-day and less to-morrow, according to supply and demand, like all other value. When employed in exchange, whether as coin or bullion, or hoarded for simply their intrinsic value, they are money; when employed with an accumulation of labor in the arts they cease to be money and are wealth for their original and artistic value combined.

The notion of money as a measure of value is of no importance except in the sense of limiting price to value, when price may be extended by a currency that is not money. Money costs labor and capital and limits price to value in equivalents costing like labor and capital, varying with supply and demand. But a currency of debt may be produced without labor or capital, and carry price beyond value into the region of fiction illimitably. In this sense only is money a measure of value, i. e., as a common equivalent, since of two objects of exchange, both variable, each measures the value of the other, and it is as correct to say that a bushel of wheat measures the value of a dollar—25.8 grains of standard gold—as that a dollar measures the value of a bushel of wheat.

When a "Philistine" asks, What is a dollar? I imagine he does not intend the question to cover, as the *Nation* supposes, a knowledge of the laws which regulate the economical relations of men in civilized society, any further than they are directly concerned with money. He means to ask, I think, What is the nature of money? This is the particular problem that scholars have tortured out of science and out of common sense. Money is a simple matter of commerce that circulates by weight; but this fact is obscured by the blind and uncertain thing and term "dollar" in this country, and by other things and terms as blind in other countries. The dollar is sometimes of silver, and sometimes of gold, and sometimes of one weight and quality, and sometimes of another, according to the caprice of Government. It is always an irregular fraction of the troy ounce of one or the other metal, and Government has so often tampered with it that people have come to consider it as within the province of Government to determine what is money, and what is the value of money. It can do no such thing, but it can determine what shall be currency, and demonetizes it, as it has done to our sorrow by making it mere debt.

There is no reason in the world why money should not be weighed by the avoirdupois or troy standard, and, having the simple and well known unit, ounce, or pound, be passed from hand to hand like all other ponderable commodities of commerce. If this were done it would be difficult, if not impossible, to make men believe that a piece of paper, or a mere promise, is an ounce or pound of metal, or its equivalent, which is in effect

what they are made to believe now, by having a mysterious unit out of the regular line of notation of the customary weights employed in trade. We want coinage only to determine with ease the purity of the metal, and make a sufficient number of small pieces convenient for handling, and not with reference to the nature or value of money, which is determined by the commercial world, and is the same whether in coin of this or of any other nation, or in bars or ingots of any weight or any degree of fineness. Only the pure metal is money; the alloy in coin is of no value.

In their teachings, with respect to money, scholars are untrue to science, and they have retrograded since the establishment of the Bank of England. The abnormal functions and operations of that bank appear to have thrown the whole subject of money into confusion in their minds, and they teach an absurdity that, practically, the bank creates capital by substituting its debt for money. Adam Smith teaches, and the more modern writers follow him in teaching, that the kiting of one debt against another, as for instance the debt of the Government against the debt of the bank, produces notes which, being substituted for gold and silver, enable the country to export an equal amount of those metals at their full natural value and obtain an equivalent value of foreign merchandise in return, with a clear gain of so much capital. This is equivalent to saying that mining produces two separate capitals by one effort of labor and capital, one in raising the metals and another in parting with them; as if a miner could produce capital by digging gold and then produce as much more by merely exchanging his gold for something else! The idea is not only false, it is preposterous; yet it is taught by scholars as economical science. The fact is the precious metals thus displaced are not exported at their natural value, as they would be if so much additional metal were produced which would lower its value, of course. No more labor or capital being employed, and no more of the metals being produced to supply the export demand, that demand is unnatural and is forced upon the pre-existing stock of gold and silver, which is thus reduced without any equivalent for the reduction, by the factitious depreciation of its value through the addition and circulation of promises to pay money that was never produced. The money thus displaced is lost to the country by being paid away in so much additional price for imports. In other words, it is sold at its paper depreciation and not at its natural value.

Locke knew more of the true nature of money than Adam Smith, and Adam Smith more than John Stuart Mill. I say the scholars have *advanced backwards* on this subject. I quote from Adam Smith—"Mr. Locke remarks a distinction between money and other moveable goods. All other moveable goods, he says, are of so consumable a nature that the wealth which consists in them cannot be much depended on; and a nation which abounds in them one year may, without any exportation, but merely by their own waste and extravagance, be in great want of them the next. Money, on the contrary, is a steady friend, which, though it may travel about from hand to hand, yet if it can be kept from going out of the country is not very liable to be wasted or consumed. Gold and silver, therefore, are, according to him, the most solid and substantial part of the moveable wealth of a nation."

This is better than Adam Smith's own doctrine, which is that paper

currency which displaces gold and silver is a saving, whereas I know it to be a loss, of those metals. And Mr. Mill maintains that ordinary credits of all sorts, bills of exchange, promissory notes, book debts, &c., have the same effect upon prices and are as useful as money. He adopts Smith's bad theory, and adds this of his own, which is one degree worse. It has been exploded by the experience of this country during the last six years. Never before were general credits so limited here, in relation to capital, and never before were general prices so high. But every business man knows that an ordinary promissory note expresses or represents the ownership of capital—not money; while a bank note pretends to represent money as perfectly and as usefully as if it were a certificate of deposit, and there were no such notes in circulation uncovered by specie in the banks. Of course its representation is false.

Mr. Locke's doctrine, above stated, is essentially true, since, unless by the conquest or robbery of other nations, gold and silver must be the direct or indirect product of the industry of the country and therefore wealth, and money can only be kept from going out of the country by a sufficient supply of other circulating capital to maintain its equivalence of value with that other capital, provided always that "paper money" is not permitted in the currency. Without this element of depreciation and expulsion, the precious metals in the country are the sure accompaniment and indicator of the true sum of its wealth. And just so long as it can maintain its money at a higher value than that of other countries, it must sell goods and receive money, and, to the extent of its capital, have the advantage of them in commerce, since customers carry their money and business to the best market.

The plain truth is that money must be produced by labor, and every new dollar is new wealth, exportable when in excess, like every other increased product of labor; but promises to pay dollars may be formed into currency *ad infinitum* without any new wealth. Nothing is necessary for this purpose but to buy and sell existing commodities over and over again on credit, make notes and get them discounted at bank, and, without the slightest addition to wealth or capital, increase the bank deposits and loan by the same transaction, and increase prices accordingly. Or any two men may fly kites by exchanging notes, without buying and selling any goods at all, and convert them into currency through bank discounting. "Dollars" of moonshine, interchangeable with money, may thus be thrown into the market and keep money cheaper than merchandise for export for ever. Real money is thus depreciated and forced abroad at a loss to the capital of the country. In this way we lose our California gold.

If partisan politics could be stifled in the selection of a Secretary of the Treasury, and we could have in that officer a "man of affairs" acquainted with the true nature of money, all this might be changed. He would need the same support from Congress and his colleagues in the Cabinet that was granted to Mr. Chase. With this he could maintain the normal value of money here, and enable us to build ships and sail them, and supply cargoes, cheaper than any other people. Simply by pursuing this natural and true policy we could sweep from the seas almost the entire foreign trade of Great Britain, and command the commerce of the world. For this purpose we have ample capital, just the right sort and variety of material, and vigorous enterprise and industry.

Unequalled natural resources, which admit of great waste, push the nation forward in spite of a wretched political economy that cripples our energies with the high prices of cheap money, and throws our commerce with our money into the hands of other nations who cheapen money unnaturally, more or less, themselves, and thereby afford us an opportunity to take the lead of them in commerce. We shall avail ourselves of this opportunity when our "Philistines" take hold of political economy, study it by the light of experience, learn that paper is not gold, nor debt money, nor poverty wealth, although called "dollar" ever so fiercely and used as a medium of exchange. They must think for themselves, undeterred by the metaphysical quibbling and scholastic subtleties that obscure the subject and pass for science in the books, and they will find the right policy of the nation to be the utmost possible contraction of its currency and expansion of its capital, and that money is a most essential part of the capital which, being thus kept at the highest value, will flow into the country as freely and as irresistibly as the invisible air.

MINERAL PRODUCTIONS OF GREAT BRITAIN.

Mr. Robert Hunt, of the Museum of Practical Geology, Jermyn street, has issued his "Mineral Statistics of the United Kingdom" for the year 1866. The volume is as usual prefaced by Sir Roderick Murchison, who draws attention to the remarkable increase in the production of coal during the past year, notwithstanding the depression in many manufactures, and especially that of iron. The produce of the collieries of the United Kingdom for 1866, is as under :

	Tons.		Tons.
Darham and Northumberland....	25 194,550	Cheshire.....	595 529
Cumberland.....	1,420,421	Shropshire.....	1,520,709
Yorkshire.....	9,714,700	Gloucestershire and Somersetshire	1,552,729
Derbyshire.....	4,750,510	Monmouthshire.....	4,443,680
Nottinghamshire.....	1,600,560	South Wales.....	9,574,443
Leicestershire.....	866,560	North Wales.....	2,033,000
Warwickshire.....	775,000	Scotland.....	19,691,000
Staffordshire and Worcestershire.	12,298,580	Ireland.....	122,750
Lancashire.....	12,530,500		
Total.....			112,000,044

The estimated value of that coal is £25,407,635. This gives an increase of 3,479,957 tons in 1866 over the production of the previous year, and Mr. Hunt justly remarks that this regularly continued increase in the quantity of coals raised from the collieries of the United Kingdom is a remarkable feature of the year 1866. It must be remembered that the year was marked by great commercial disturbances, and that several kinds of manufacture, and that of iron especially, were suffering from a severe depression. In 1856 there were 2,815 collieries in England and Wales, and in 1866 there were 3,188. The quantity of iron ore produced in this country last year was 9,665,012 tons, about 300,000 tons less than the quantity returned in 1855. In the same period the quantity of pig iron made was 4,530,051 tons, or 289,203 tons less than the production of our blast furnaces in the previous year. The estimated value of iron ore raised in the United Kingdom amounted to £3,119,098 19s. 6d. Foreign ore imported, 56,680 tons; custom house value, £49,081; making a total quantity of 9,721,701 tons converted into iron. The number of furnaces in blast were 618. Pig iron produced: In England, 2,576,928 tons; in Wales, 959,123 tons; in Scotland, 994,000 tons. Total production of pig iron in Great Britain 4,530,051 tons. This quantity, estimated at the mean average cost at the place of production, would have a value of £11,309,742.

THE NATIONAL BANKS—THEIR CONDITION OCTOBER, 1867.

In consequence of the general interest with which the quarterly statements of the National Banks are looked for by the public, the official tables have been issued by the Comptroller of the Currency more promptly than usual, and we are able to publish them in full this month. The first tables we give are the returns of the Banks of the chief cities as follows:

RESOURCES.

	New York.	Boston.	Philadelphia.	Baltimore.	Albany.	Cincinnati.	Chicago.	St. Louis.	Pittsburgh.
Loans and Discounts.....	150,693,917 66	60,718,173 53	35,314,023 85	14,543,851 33	6,655,066 47	6,382,613 66	9,354,703 24	8,470,379 00	12,236,781 11
Overdrafts.....	174,165 65	7,641 90	10,979 39	.....	.....	.....	.....	.....	.....
U. S. bonds deposited to secure circulation.....	43,376,500 00	29,005,350 00	13,128,000 00	8,907,500 00	2,492,100 00	3,788,000 00	4,631,400 00	3,343,200 00	7,077,000 00
U. S. bonds and securities deposited to secure deposits.....	4,934,000 00	1,900,000 00	1,933,400 00	800,000 00	200,000 00	2,267,500 00	511,650 00	485,000 00	600,000 00
U. S. If undrawn Securities on hand.....	14,680,243 73	3,053,800 00	2,510,370 00	121,600 00	487,300 00	456,350 00	239,750 00	473,350 00	310,800 00
Other Stocks, Bonds, & Mortgages.....	6,134,013 99	705,650 00	1,644,550 44	499,991 43	1,231,700 01	5,500 00	73,360 00	1,324,969 03	59,397 85
Due from National Banks.....	9,654,998 09	9,742,493 22	3,631,391 75	2,019,841 63	3,174,359 83	585,435 33	2,533,648 03	1,024,693 54	1,811,430 73
Due from other banks and bankers.....	2,666,680 47	90,110 92	6,686,268 10	133,643 00	93,443 00	144,350 71	171,450 73	153,479 20	85,470 84
Banking House.....	5,563,328 33	1,380,434 47	1,171,406 11	573,993 83	240,303 83	143,471 33	51,267 03	847,303 05	497,355 25
Other Real Estate.....	373,443 84	30,913 53	108,054 80	.....	.....	.....	.....	.....	.....
Furniture and Fixtures.....	70,353 62	32,965 99	410,894 89	144,747 94	3,530 71	107,642 40	101,568 23	88,163 17	153,678 93
Preminia.....	1,333,356 94	45,364 92	393,046 13	90,553 01	14,566 05	.....	35,537 05	92,439 21	63,245 30
Exchanges for Clearing House.....	102,570,664 65	6,169,719 97	5,460,022 56	844,771 35	1,201,869 00	217,005 53	2,534,694 19	330,599 30	473,033 09
Checks and other cash items.....	5,463,959 51	561,547 96	149,971 73	130,668 00	130,413 00	265,608 00	31,445 00	340,974 00	184,051 00
Bills of National Banks.....	1,900,411 00	916,327 00	500,688 00	4,393 00	1,207 00	1,900 00	.....	16,460 00	5,168 00
Bills of other Banks.....	30,888 00	3,066 00	12,963 00	4,393 00	.....	.....	4,546 95	10,669 40	5,132 59
Specie.....	7,361,568 00	617,864 80	733,394 97	303,366 63	30,323 53	33,470 46	.....	.....	.....
Practical Currency.....	231,317 64	108,380 91	166,547 15	2,919,003 96	749,904 43	1,376,953 13	2,778,353 91	1,488,760 70	2,234,808 06
Legal Tender Notes.....	23,686,337 10	8,353,166 00	11,017,508 00	.....	.....	.....	.....	.....	.....
Compound Interest Notes.....	20,971,375 00	5,462,590 00	4,810,170 00	1,405,150 00	1,545,700 00	584,010 00	704,710 00	544,900 00	910,945 00
	411,918,842 20	128,901,208 83	83,380,130 33	783,413 19	17,910,704 84	16,540,890 03	94,088,135 03	13,533,735 69	37,412,000 13

LIABILITIES.

	New York.	Boston.	Philadelphia.	Dallimore.	Albany.	Cincinnati.	Chicago.	St. Louis.	Pittsburgh.
Capital Stock.....	74,800,700 00	42,850,000 00	14,517,150 00	10,191,085 00	3,006,000 00	4,000,000 00	5,300,000 00	6,750,300 00	9,000,000 00
Surplus Fund.....	18,048,861 87	7,703,641 25	5,426,351 09	1,594,091 99	709,000 00	719,000 80	882,161 00	592,318 08	1,659,000 88
Undivided Profits.....	7,946,865 98	1,115,073 37	1,974,678 43	885,894 12	550,833 75	323,988 64	434,695 35	457,523 43	728,606 61
Circulating Notes.....	84,979,627 00	25,356,833 00	19,931,750 00	7,005,078 00	2,198,055 00	3,263,550 00	4,073,640 00	2,775,514 00	6,678,443 00
National State.....	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00
Individual Deposit.....	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00
U. S. Deposits.....	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00
U. S. Disbursements.....	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00
to National Banks.....	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00
Due to Bankers.....	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00
Due to.....	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00
	\$411,943,843 30	128,901,308 88	83,320,139 39	33,738,413 19	17,919,704 84	16,540,880 08	24,088,125 08	18,033,785 00	\$7,413,000 13

Below we give the quarterly reports of the National Banks of each State. The returns for July last will be found in the MAGAZINE, vol. 57 page 194, and those for April last in vol. 56 page 378.

RESOURCES.

	New York.	Massachusetts.	Pennsylvania.	Ohio.	Connecticut.	Illinois.	R. Island.	New Jersey.	Maryland.	Indiana.
Loans and discounts.....	214,594,018 59	108,123,797 10	73,023,115 81	50,668,219 28	37,453,350 64	18,330,468 57	91,103,031 99	17,980,611 55	17,304,049 06	13,989,331 19
U. S. bonds to secure circul'n.....	78,991,850 00	64,290,900 00	44,043,700 00	30,775,900 00	19,740,000 00	10,938,150 00	14,535,600 00	10,438,400 00	10,085,750 00	12,869,850 00
U. S. bonds & secur. on hand.....	8,301,450 00	4,858,050 00	6,086,100 00	4,961,000 00	1,742,000 00	1,142,000 00	1,385,500 00	818,600 00	980,100 00	1,123,400 00
Other stocks, bonds & mortg.....	11,073,791 14	1,674,737 88	2,444,425 39	3,001,714 88	1,913,050 00	1,171,050 00	2,501,359 89	330,870 35	513,000 00	813,600 00
Due from National Banks.....	22,871,401 16	17,690,089 40	12,443,145 03	5,453,345 81	4,190,589 48	2,898,398 35	4,969,700 81	2,697,539 20	1,640,389 93	2,640,389 93
Due from other banks & bank's.....	3,154,043 82	2,383,076 23	1,355,456 71	723,494 04	1,380,589 48	443,993 61	350,884 60	283,724 87	184,849 59	264,195 94
Banking houses, real estate &c.....	7,703,985 97	2,353,341 48	2,800,707 19	411,935 01	900,364 87	443,993 61	350,884 60	283,724 87	184,849 59	264,195 94
Current expenses.....	1,778,168 43	144,868 85	980,879 91	81,915 44	300,364 87	443,993 61	350,884 60	283,724 87	184,849 59	264,195 94
Prepaid.....	1,204,358 08	76,399 86	500,156 81	61,935 01	100,364 87	443,993 61	350,884 60	283,724 87	184,849 59	264,195 94
Cheques and other cash items.....	111,150,559 67	7,157,777 39	4,597,646 87	715,249 54	877,464 34	2,770,101 73	657,453 64	468,854 77	401,486 06	359,698 77
Bills of National Banks.....	2,971,023 00	1,560,376 00	1,355,063 00	924,393 00	550,187 00	704,594 00	363,190 00	241,571 00	405,556 00	389,698 00
Bills of other banks.....	88,459 00	10,549 00	59,735 00	31,735 00	61,735 00	1,774 00	8,406 00	8,904 00	10,148 00	13,476 00
Specie.....	7,005,207 30	703,549 90	59,735 00	61,735 00	61,735 00	1,774 00	8,406 00	8,904 00	10,148 00	13,476 00
U. S. fractional cur., leg. tend. n.....	23,183,447 81	703,549 90	59,735 00	61,735 00	61,735 00	1,774 00	8,406 00	8,904 00	10,148 00	13,476 00
Compound interest notes.....	56,305,750 00	7,970,540 00	5,135,025 00	5,135,025 00	5,135,025 00	1,841,100 00	1,841,100 00	1,841,100 00	1,841,100 00	1,841,100 00
Aggregate.....	650,008,740 56	339,132,120 16	197,981,041 26	74,540,351 51	61,103,308 71	47,197,137 06	42,733,937 19	36,071,144 77	40,186,798 83	36,330,333 11

LIABILITIES.

Capital stock.....	\$1,384,941 00	79,693,000 00	49,261,148 16	81,904,700 00	94,634,990 00	11,880,000 00	90,364,500 00	11,880,360 00	11,880,360 00	12,590,309 50	12,517,000 00
Surplus fund.....	23,221,873 03	13,654,45 90	10,644,148 16	7,583 78	3,475,684 34	1,890,860 19	1,063,978 19	1,067,593 77	1,067,593 77	1,481,960 78	1,582,802 81
U. S. bonds to secure circ'n.....	6,411,657 49	8,24 75 94	4,682,914 73	1,706,804 37	1,618,936 96	1,119,304 43	970,433 69	1,016,633 91	1,016,633 91	1,081,601 86	789,802 81
U. S. bonds to secure de'pos.....	6,500,000 00	66 4 81	37,079,063 00	18,303,943 00	17,363,184 00	9,482,893 00	13,419,049 00	9,064,070 00	9,064,070 00	9,705,269 00	10,771,289 00
Circ'ing notes outst'd.....	1,003,481 00	63 81	689,570 00	94,410 00	336,184 00	2,691 00	13,419,049 00	283,665 00	283,665 00	317,259 00	9,183 00
Individual deposits.....	6,401,913 03	57,289 49	72,053,148 91	23,865,843 98	11,737,169 84	18,063,406 45	6,030,631 31	13,710,294 96	13,710,294 96	12,832,669 13	6,949,741 46
United States deposits.....	4,610,687 61	34 4 57	1,122,423 58	3,916,312 41	871,675 28	1,061,467 45	451,390 28	632,396 56	632,396 56	554,668 41	880,165 46
Dep'ts of U. S. de'p't of ag'c'.....	8,604,810 81	13,734,757 33	8,883,104 48	70 26	90,147 44	1,074,041 16	12,363 50	96,593 16	96,593 16	176,313 05	177,981 47
Due to National banks.....	1,180,676 91	1,180,676 91	1,943,13 99	49 47	1,898,094 67	4,704,701 15	537,130 59	4,457,130 59	4,457,130 59	1,066,466 54	79,975 80
Due to other banks & bank's.....	555,039,745 96	250,132,136 16	167,861,041 38	74,604,533 81	61,105,306 71	47,167,157 96	42,765,937 18	88,671,144 37	88,671,144 37	40,138,798 38	33,330,333 31
Aggregate.....											

RESOURCES.

Loans and discounts.....	9,870,365 17	993,104 58	7,144,293 80	5,376,700 46	5,349,854 39	2,073,761 92	2,934,313 59	2,934,313 59	2,934,313 59	2,934,313 59	2,934,313 59
U. S. bonds to secure circ'n.....	8,407,320 00	780,000 00	1,948,300 00	6,474,000 00	5,713,150 00	4,727,600 00	5,863,370 00	472,100 00	472,100 00	1,490,550 00	2,160,319 99
U. S. bonds to secure de'pos.....	745,000 00	300,000 00	60,000 00	670,000 00	489,000 00	399,000 00	540,000 00	500,000 00	500,000 00	451,000 00	161,000 00
U. S. b'ds & secur't's on hand.....	639,150 00	161,160 00	13,040 00	675,100 00	399,000 00	399,000 00	813,660 00	1,000 00	1,000 00	944,650 00	86,450 00
Other cash, bills & mort.....	273,176 67	115,351 79	81,673 78	77,353 24	135,311 71	97,300 00	76,877 10	33,110 00	33,110 00	103,730 74	16,000 00
Due from National banks.....	1,599,145 79	437,131 98	829,083 63	1,039,973 98	1,194,601 25	1,300,436 94	1,870,344 29	233,413 45	233,413 45	892,856 45	376,424 81
Due from oth' ba'ks & ban'rs.....	263,888 81	61,535 01	110,385 19	17,053 86	143,967 58	103,370 14	100,079 95	143,183 68	143,183 68	121,848 25	76,869 55
Banking houses, r'l est., &c.....	86,557 26	15,940 81	44,231 53	33,976 46	56,133 43	44,923 88	176,668 49	23,947 26	23,947 26	166,553 01	104,228 75
Premiums.....	19,491 47	13,631 43	7,065 47	32,781 08	18,901 06	11,179 66	55,360 26	26,144 30	26,144 30	43,727 30	16,961 14
Checks and other cash items.....	953,333 79	24,319 35	46,174 97	130,816 80	152,678 68	76,399 83	534,886 65	53,483 96	53,483 96	19,263 86	24,513 58
Bills of ex'ch.....	170,515 00	40,309 00	38,915 07	58,684 00	965,990 00	154,314 00	159,486 00	83,671 63	83,671 63	67,161 64	6,805 94
Bills of their banks.....	8,231 00	30,861 00	6,948 00	1,037 00	6,273 00	531 00	761 00	33,316 00	33,316 00	304,435 00	26,011 00
Specie.....	21,839 97	27,763 43	4,644 61	16,363 69	26,720 33	9,349 71	10,435 23	318,986 30	318,986 30	36,367 07	2 169 00
U. S. de'p't of ag'c'.....	814,050 75	203,578 47	156,893 55	668,701 57	1,395,123 99	483,754 23	1,036,135 36	726,479 73	726,479 73	303,806 59	303,806 59
Compound int. due.....	591,360 01	93,910 00	146,610 00	337,760 00	877,440 00	237,870 00	337,840 00	65,770 00	65,770 00	137,660 00	90,480 00
Aggregate.....	32,643,912 13	3,303,563 08	4,763,441 66	15,490,163 86	13,183,729 33	13,183,694 60	11,532,916 94	3,017,681 88	3,017,681 88	6,960,539 95	5,216,37 63

LIABILITIES.

Capital stock.....	9,870,365 17	993,104 58	7,144,293 80	5,376,700 46	5,349,854 39	2,073,761 92	2,934,313 59	2,934,313 59	2,934,313 59	2,934,313 59	2,934,313 59
Surplus fund.....	23,221,873 03	13,654,45 90	10,644,148 16	7,583 78	3,475,684 34	1,890,860 19	1,063,978 19	1,067,593 77	1,067,593 77	1,481,960 78	1,582,802 81
U. S. bonds to secure circ'n.....	6,411,657 49	8,24 75 94	4,682,914 73	1,706,804 37	1,618,936 96	1,119,304 43	970,433 69	1,016,633 91	1,016,633 91	1,081,601 86	789,802 81
U. S. bonds to secure de'pos.....	6,500,000 00	66 4 81	37,079,063 00	18,303,943 00	17,363,184 00	9,482,893 00	13,419,049 00	9,064,070 00	9,064,070 00	9,705,269 00	10,771,289 00
Circ'ing notes outst'd.....	1,003,481 00	63 81	689,570 00	94,410 00	336,184 00	2,691 00	13,419,049 00	283,665 00	283,665 00	317,259 00	9,183 00
Individual deposits.....	6,401,913 03	57,289 49	72,053,148 91	23,865,843 98	11,737,169 84	18,063,406 45	6,030,631 31	13,710,294 96	13,710,294 96	12,832,669 13	6,949,741 46
United States deposits.....	4,610,687 61	34 4 57	1,122,423 58	3,916,312 41	871,675 28	1,061,467 45	451,390 28	632,396 56	632,396 56	554,668 41	880,165 46
Dep'ts of U. S. de'p't of ag'c'.....	8,604,810 81	13,734,757 33	8,883,104 48	70 26	90,147 44	1,074,041 16	12,363 50	96,593 16	96,593 16	176,313 05	177,981 47
Due to National banks.....	1,180,676 91	1,180,676 91	1,943,13 99	49 47	1,898,094 67	4,704,701 15	537,130 59	4,457,130 59	4,457,130 59	1,066,466 54	79,975 80
Due to other banks & bank's.....	555,039,745 96	250,132,136 16	167,861,041 38	74,604,533 81	61,105,306 71	47,167,157 96	42,765,937 18	88,671,144 37	88,671,144 37	40,138,798 38	33,330,333 31
Aggregate.....											

* Excluding St. Louis, published on p. 356.

RESOURCES.

	Mississippi.	Alabama.	Arkansas.	S. Carolina.	N. Carolina.	Kansas.	Louisiana.	Minnesota.	Georgia.	W. Virginia.
Loans and discounts	130,180 27	423,144 85	360,815 24	586,975 15	616,661 09	409,049 43	1,408,741 51	3,093,024 77	1,798,090 89	2,378,180 44
U. S. bonds to secure circ'l'n	76,000 00	240,500 00	200,000 00	170,000 00	346,000 00	882,600 00	1,263,000 00	1,893,500 00	1,893,500 00	2,943,850 00
U. S. bonds & secur. on hand	1,500 00	.....	150,000 00	.....	200,000 00	200,000 00	.....	100,000 00	400,000 00	868,000 00
Other stocks, bonds & morg.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Due from National Banks	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bank's g' house, real estate, &c	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Current expenses	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Premiums	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Checks and other cash items	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bills of National Banks	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bills of other banks	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Specie	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Frac. cur., leg' tender notes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Compound interest notes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Aggregate	402,813 08	1,091,111 50	1,041,838 99	1,530,946 39	1,533,087 76	1,948,857 35	3,850,603 15	5,405,515 60	4,883,188 88	7,313,617 53

LIABILITIES.

	Mississippi.	Alabama.	Arkansas.	S. Carolina.	N. Carolina.	Kansas.	Louisiana.	Minnesota.	Georgia.	W. Virginia.
Capital stock	150,000 00	400,000 00	200,000 00	538,000 00	534,600 00	400,000 00	1,300,000 00	1,660,000 00	1,000,000 00	2,316,400 00
Surplus fund	6,903 80	13,873 15	19,553 51	13,988 57	36,108 80	80,288 66	57,449 79	146,331 45	105,275 57	171,473 1
Undivided profits	16,775 63	83,663 65	94,837 57	91,835 47	43,639 84	55,375 91	119,435 84	204,911 58	199,173 33	105,178 4
Circulat'g notes outst'g—Nat.	40,600 00	207,794 00	179,490 00	147,506 00	280,460 00	311,355 00	1,094,264 00	1,539,919 00	1,323,965 00	1,974,716 0
State.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Individual deposits	161,683 46	293,452 73	324,133 40	538,692 36	843,318 63	633,596 15	684,110 99	1,811,334 87	1,395,853 26	2,404,113 4
United States deposits	.....	235 89	231,539 63	.....	130,331 33	69,563 17	.....	100,636 00	225,082 19	113,389 9
Depos. of U. S. then g' officers	.....	.....	.....	.....	132,003 46	415,329 63	.....	469 00	116,814 98	69,006 9
Due to National Banks	21,400 10	3,438 87	.....	92,008 31	19,308 81	57,390 81	68,463 61	49,005 48	70,369 80	88,590 5
Due to other banks & bank's	.....	70,669 81	.....	19,042 79	7,397 39	26,284 53	399,969 53	17,023 97	14,854 74	90,330 1
Aggregate	402,813 08	1,091,111 50	1,041,838 99	1,530,946 39	1,533,087 76	1,948,857 35	3,850,603 15	5,405,515 60	4,883,188 88	7,313,617 53

RESOURCES.

	Virginia.	Colorado.	Nebraska.	Idaho.	Montana.
Loans and discounts.....	\$ 3,499,896 16	446,238 11	508,764 02	71,506 81	74,676 85
U. S. bonds to secure circ'n	2,335,800 00	297,000 00	190,000 00	52,000 00	40,000 00
U. S. bonds to secure depos.	261,600 00	160,000 00	308,860 00	.....	30,000 00
U. S. bonds & so on hand	56,800 00	50,900 00	244,360 00	.....	.....
Other stocks bonds & mortg.	44,086 79	11,064 50	39,514 45	.....	1,374 92
Due from National banks....	733,137 07	800,879 36	474,325 39	13,929 06	6,996 00
Due from other b'ks & b'kers	62,889 77	13,468 97	18,495 80	.....	13,292 42
Bank's house real estate, &c.	264,773 58	97,500 59	59,010 80	9,435 60	15,289 57
Current expenses.....	76,733 85	31,403 98	23,712 70	10,536 36	4,456 00
Premiums.....	51,944 98	8,334 70	10,498 11	.....	.....
Checks and other cash items	310,773 16	29,009 75	29,387 89	6,042 93	29,315 39
Bl of National banks....	148,186 00	71,422 00	127,645 00	2,683 00	625 00
Bills of other banks.....	11,368 00	.....	436 00	.....	.....
Specie.....	125,668 98	11,447 52	15,707 74	9,755 29	2,495 20
Frac. cur. legal tender notes	594,864 58	138,816 85	244,325 08	8,453 55	3,743 50
Compound interest notes...	122,310 00	800 00	32,030 00	.....	240 00

Aggregate..... 3,660,810 35 1,646,786 26 2,327,190 41 183,743 09 217,509 95

LIABILITIES.

Capital stock.....	2,400,000 00	350,000 00	283,350 00	100,000 00	100,000 00
Surplus fund.....	148,109 10	58,000 00	5,743 08	.....	.....
Undivided profits.....	181,738 48	117,315 77	116,878 80	3,309 24	19,253 14
Circula'g notes outst'd—Nat	2,080,320 00	254,000 00	166,300 00	23,683 00	33,975 00
State.....	.....	.....	.....	.....	.....
Individual deposits.....	2,309,803 97	663,313 32	1,308,929 47	26,918 52	43,714 33
United States deposits.....	122,977 58	59,644 52	24,879 33	.....	10,493 43
Depos. of U. S. disb'g offic's	196,164 61	68,518 74	511,321 53	.....	.....
Due to National banks.....	173,914 37	45,889 09	9,950 21	5,350 00	.....
Due to other b'ks & bank's	97,398 24	111 32	1,968 49	14,689 33	2,375 01

Aggregate..... 3,660,810 35 1,646,786 26 2,327,190 41 183,743 09 217,509 95

The abstract of the quarterly reports of all the National Banking associations of the United States on the first Mondays of October and July last is as follows: in the MAGAZINE of May, Vol. 56, page 380 will be found the previous returns, for each quarter since October 1863.

RESOURCES.

	July, 1867.	Oct., 1867.*
Loans and discounts, including overdrafts.....	\$688,100,703 62	\$690,000,000 35
U. S. bonds deposited to secure circulation.....	267,735,260 00	268,510,150 00
U. S. bonds & soc. dep. to secure deposits.....	33,302,760 00	33,211,450 00
U. S. bonds and securities on hand.....	45,622,300 00	42,178,150 00
Other stocks, bonds and mortgages.....	21,452,040 43	21,375,463 32
Due from National banks.....	92,287,906 39	95,212,308 45
Due from other banks and bankers....	9,603,443 12	8,386,600 60
Real estate, furniture, &c.....	19,755,028 70	20,637,011 95
Current expenses.....	3,217,747 70	5,295,728 23
Premiums.....	8,261,247 11	2,735,733 78
Checks and other cash items.....	123,255,674 49	124,520,008 96
Bills of National Banks.....	16,123,698 00	11,839,066 00
Bills of other Banks.....	531,264 00	3,230 00
Specie.....	9,602,073 97	10,250,114 80
Legal Tender Notes and Fractional Currency.....	102,431,846 96	100,511,321 83
Compound Interest Notes.....	75,455,915 00	66,896,440 00

Total..... \$1,491,433,532 49 \$1,496,552,355 17

LIABILITIES.

Capital Stock paid in.....	\$418,123,148 50	\$419,952,415 00
Surplus Fund.....	63,229,585 63	60,666,567 01
Undivided Profits.....	30,636,077 80	33,531,329 41
National Bank Notes Outstanding.....	291,491,033 00	293,604,381 00
State Bank Notes Outstanding.....	4,422,505 00	3,602,153 00
Individual Deposits.....	537,682,919 21	541,292,175 82
United States Deposits.....	29,764,089 09	23,071,415 71
Deposits of U. S. Disbursing Officers.....	3,407,608 19	4,637,364 92
Due to National Banks.....	69,817,082 74	93,111,340 19
Due to other Banks and Bankers.....	22,808,354 58	19,611,940 50

Total..... \$1,491,433,532 49 \$1,496,552,355 97

* Including all statements except 1st N. B. Portland Oregon capital \$100,000.

TRADE OF GREAT BRITAIN AND THE UNITED STATES.

COTTON, BREADSTUFFS, PROVISIONS, TOBACCO, ETC.

From the British Board of Trade returns, just issued, it appears that during the first seven months of the present year a considerable falling off has taken place in the value of the produce and manufactures exported from Great Britain to this country. The decline shown in the statement recently published by the British Board of Trade is not, however, so much the result of the diminution in the extent of the trade, as of the heavy decline in prices which has taken place in many of the leading articles of manufacture exported by Great Britain. This is more especially the case with regard to cotton, in which a heavy decline has been produced by the continued desire shown by holders to sell. In the seven months ending July 31, the declared value of the exports of British and Irish produce and manufactures to this country was as under :

	1885.	1886.	1887.
Ports on the Atlantic—Northern.....	£7,469,833	£16,303,977	£12,402,073
—Southern.....	84,705	643,830	774,286
Ports on Pacific	812,374	436,143	430,516
Total	£7,546,861	£17,383,950	£13,777,775

In the first eight months of the present year the total exports of British and Irish produce and manufactures amounted to £121,056,913, against £125,265,820 in 1886, and £102,400,696 in 1885. These figures are very favorable, and they show that, notwithstanding the alleged lackness of trade in Great Britain, the exports are still on a very considerable and very important scale. Of the above exports, the proportion forwarded to the United States was as follows :

EXPORTS OF BRITISH AND IRISH PRODUCE AND MANUFACTURES TO THE UNITED STATES
IN EIGHT MONTHS.

	1885.	1886.	1887.
Alkali.....	\$361,443	\$615,117	\$337,337
Beer and ale.....	26,461	45,544	56,751
Coals.....	70,714	63,085	60,333
COTTON MANUFACTURES—			
Piece goods.....	977,600	2,446,194	1,797,714
Thread.....	75,259	241,353	251,855
Earthenware and porcelain.....	248,686	514,340	496,399
Haberdashery and millinery.....	476,789	229,090	714,334
HARDWARES AND CUTLERY—			
Knives, forks, &c.....	78,066	190,773	159,331
Anvils, vices, &c.....	53,490	68,587	66,970
Manufactures of German silver, &c.....	155,660	461,307	331,067
LINEN MANUFACTURES—			
Piece goods.....	1,619,106	2,736,336	1,968,819
Thread.....	87,964	167,170	115,630
METALS—			
Iron—Pig, &c.....	70,851	193,938	254,335
Bar, &c.....	104,767	866,393	250,339
Railroad.....	331,899	507,809	522,033
Castings.....	3,033	12,343	2,333
Hoops, sheets and boiler plates.....	43,490	214,355	262,331
Wrought.....	90,196	151,004	94,331
Steel Unwrought.....	184,109	435,451	429,449
Copper, wrought.....	21,308	31,793	14,543
Lead, pig, &c.....	50,636	66,931	35,273
Tin plates.....	545,894	1,018,454	962,530
Oilseed.....	2,144	300,733	123,033
Salt.....	22,116	76,793	61,736

SILK MANUFACTURES—

	1865.	1866.	1867.
Broad piece goods.....	88,760	96,226	58,276
Handkerchiefs, &c.....	1,395	7,088	2,629
Ribbons, of silk only.....	17,571	15,708	6,632
Other articles of silk only.....	75,443	84,214	34,647
Other articles mixed with other materials.....	20,676	58,782	58,360
Silks, British.....	2,754	10,260	6,820
Wool.....	10,132	9,300	765
WOOLEN AND WORSTED MANUFACTURES—			
Cloths of all kinds.....	290,548	745,034	479,862
Carpets and druggets.....	157,118	547,952	514,140
Shawls, rugs, &c.....	18,088	36,486	41,001
Worsted stuffs of wool only, and of wool mixed with other material.....	1,711,458	2,727,118	1,648,000

COTTON.

The imports of cotton into Great Britain this year have fallen off as compared with 1866, owing to the decline in the receipts of produce from the East Indies. The imports from the United States, however, have slightly increased, and for the eight months ending August 31, amount to 3,940,083 cwt., against 3,834,000 cwt. in 1866. Annexed are the particulars of imports for eight months :

	1865. cwts.	1866. cwts.	1867. cwts.
From United States.....	109,863	2,624,000	2,940,083
Bahamas and Bermudas.....	118,604	6,413	10,349
Mexico.....	276,550	2,145	22
Brazil.....	294,590	495,863	467,007
Turkey.....	166,601	83,930	56,232
Egypt.....	1,006,454	735,470	861,675
British India.....	1,941,401	2,459,087	1,869,451
China.....	301,509	17,949	4,797
Other countries.....	307,226	193,734	193,054
Total.....	4,561,040	8,809,801	7,391,690

The exports of cotton in the eight months are subjoined :

	1865. cwts.	1866. cwts.	1867. cwts.
To Russia, Northern ports.....	153,716	348,235	293,735
Prussia.....	22,723	42,159	145,786
Hanover.....	14,011	5,618	2,514
Hanse Towns.....	395,380	516,477	459,123
Holland.....	26,316	347,965	378,694
Other Countries.....	727,909	1,127,323	770,656
Total.....	1,585,994	2,297,607	2,051,717

Of cotton piece goods the exports in the same periods were :

	1865.	1866.	1867.
To United States..... yards	87,849,336	87,538,274	70,000,205
To all quarters.....	1,267,426,063	1,666,594,954	1,789,176,406

BREADSTUFFS.

The high prices current for wheat in the markets of the world have rendered this branch of commerce more important than has been the case for some years past. At one period it was anticipated that the crops in England and in this country would be so considerable that an important fall in prices was inevitable. The result of the harvest, however, is much less satisfactory than had been anticipated, and instead of a decline, prices have experienced an advance. The causes of this rise in Great Britain and in Europe have been alluded to in our London correspondent's letter, and need not therefore be recapitulated. The return of

imports shows, however, that the imports of wheat into Great Britain this year have been very large, and are 5,500,000 cwt. in excess of 1866. In flour, owing to the diminished receipts from France, there is a decrease of 1,400,000 cwt. The following are the particulars of imports :

WHEAT.			
	1865.	1866.	1867.
From Russia.....	4,836,807	4,610,396	6,045,697
Denmark.....	845,204	854,108	362,452
Prussia.....	3,092,508	2,998,106	4,474,235
Schleswig, Holstein and Lauenburg.....	171,367	141,078	92,699
Mecklenburg.....	361,769	545,365	574,605
Hanse Towns.....	801,531	620,378	465,341
France.....	863,062	3,805,034	531,996
Turkey, Wallachia, and Moldavia.....	457,963	320,738	1,094,295
Egypt.....		11,769	422,273
United States.....	664,032	845,750	1,732,945
British North America.....	232,067	8,789	3,123
Other Countries.....	730,533	2,358,398	2,634,699
Total.....	11,565,473	15,539,360	21,021,647

FLOUR.			
	1865.	1866.	1867.
From Hanse Towns.....cwt.	154,401	181,923	261,222
France.....	1,550,369	3,073,740	1,971,294
United States.....	194,561	198,061	203,764
British North America.....	130,667	15,318	23,526
Other Countries.....	97,306	168,807	662,220
Total.....	2,126,704	3,637,648	2,827,526
Indian corn or maize.....	3,324,997	19,500,656	6,530,031

The exports of foreign and colonial wheat and flour in the eight months were as under :

	1865.	1866.	1867.
Wheat.....qrs.....	29,218	26,737	114,604
Flour.....cwt.....	13,687	15,779	11,736

TOBACCO.

The imports and exports into and from Great Britain during the eight months ending August 31, were :

IMPORT.			
	1865.	1866.	1867.
Stemmed.....lbs	2,713,268	5,806,237	3,232,995
Unstemmed.....	26,941,806	13,944,945	14,852,423
Manufactured and snuff.....	1,668,633	1,537,218	2,615,229

ENTERED FOR HOME CONSUMPTION.			
	1865.	1866.	1867.
Stemmed.....lbs	7,840,243	2,962,622	11,519,309
Unstemmed.....	17,540,433	17,540,314	14,562,345
Manufactured and snuff.....	547,190	573,946	620,265

EXPORTS.			
	1865.	1866.	1867.
Stemmed.....lbs	222,637	256,919	622,800
Unstemmed.....	2,194,751	9,762,163	12,014,236
Manufactured and snuff.....	941,834	1,605,870	1,654,456

PROVISIONS.

The following were the imports of provisions into the United Kingdom in the first eight months of the present and last two years :

PROVISIONS.			
	1865.	1866.	1867.
Bacon and hams.....cwt.	509,909	531,119	277,222
Beef, salt.....	161,558	14,963	120,222
Pork, salt.....	123,085	141,163	105,918
Butter.....	659,661	677,510	708,636
Cheese.....	456,103	466,610	462,699
Eggs.....Number	267,984,840	226,321,840	301,711,060
Lard.....cwt.	87,677	217,076	142,626

LIABILITY FOR THE COUNTERFEIT SEVEN-THIRTY NOTES.

We hope the Government will not deem it advisable to endeavor to compel bankers and others to return the 5 20 bonds issued to them in conversion of counterfeit 7-30 notes. It is not easy to perceive what principle of law would support such a proceeding. It would seem only consonant to reason and common sense, that if a forged note is presented to the pretended maker for payment, by an innocent purchaser, and the former, through carelessness, pays it, the loss should fall on him who, of all men, should be able to decide respecting the genuineness of the paper. In such a case it is easy to see that the person whose name is forged, by paying the note, affirms its validity. The law does not allow him, after payment to such innocent holder for value, to claim a return of the money. The rule may result in hardship to him, but it would work great wrong were it otherwise. To allow a man to demand a return of the money paid on his own forged note, after the receiver of the money has, perhaps, entirely lost sight of the person from whom he purchased the note, would be unreasonable, and result in much injustice.

Indeed, the law goes farther than this, for it is well settled that if the drawee of a forged draft, being the agent of the pretended drawer, pay such draft to a holder who has no knowledge of the fraud, he can not demand a return of the money, as he is presumed to know the signature of his correspondent. As long ago as 1762, when an action was brought by the drawee of a forged draft to recover the money which he had paid on it, neither party having knowledge of the forgery, Lord Mansfield decided that the action could not be maintained, and said: "It was incumbent upon the plaintiff to be satisfied that the bill drawn upon him was in the drawer's hand before he accepted or paid it but it was not incumbent upon the defendant to inquire into it. If there was any fault or negligence in any one, it certainly was in the plaintiff and not in the defendant." (*Price v. Neal*, 3 Burrow's Reports, 1354.) And that eminent jurist, Judge Bronson, in rendering the decision of the Court of Appeals in our own State, in the case of *Goddard and St. John against the Merchants' Bank*, (4 Comstock's Reports, 147,) only affirms the well-settled law, when he says: "The drawee of a bill is held bound to know the handwriting of his correspondent, the drawer; and if he accepts or pays a bill in the hands of a bona fide holder for value, he is concluded by the act, although the bill turns out to be a forgery. If he has accepted he must pay, and if he has paid he cannot recover the money back. This is an exception to the general rule, that money paid under a mistake of fact may be recovered back. The exception is fully established." To the same effect is the case of *The Bank of Commerce against The Union Bank*. (3 Comstock's Reports, 230.)

Now, it seems to us, that in the matter under consideration, law and justice are strongly on the side of the bankers. The 7-30 notes are Government promises to pay—they are simply promissory notes. The holders at maturity have the option of demanding of the United States either currency or 5-20 bonds. They have exercised this option, and the Government has paid its notes by the issue of bonds. The notes are therefore, discharged, and the law will not allow the payer of forged

paper, purporting to bear his signature, to recover the amount paid from an innocent party. The 7 30 notes are just as truly paid as if they had been redeemed in currency. If they were not originally genuine, payment has made them so, as far as the Government is concerned.

Other considerations tend to confirm this view of the matter. Prominent among these is the lapse of time. The notes were converted weeks ago. The bankers have closed up their transactions. They have settled accounts with their principals, the owners of the notes, and delivered the bonds to them. Suddenly they are startled by the announcement that the notes are forged, and that it is purposed to hold them responsible. It seems to us that they may with reason answer that it is now too late—that the time of their responsibility, if they ever were responsible at all, has passed by—that if they had been notified immediately, the loss would have fallen on the original owners, and not on them. If the delay has been caused by official routine, and the necessity of examining the notes carefully in their order, payment should not have been made until this examination was finished, and every test of genuineness applied.

Indeed the point of agency is a very important one. Although the bankers did not, in each individual case, declare to the department the names of the persons for whom they were acting, it was still well known, from the nature of their business, that they were not personally the owners of the millions of notes which they presented for conversion. It would seem reasonable that they should be allowed to set up their representative character in justification of a refusal to return the 5-20 bonds.

Again, suppose it should be made to appear that these counterfeiters are merely duplicates, issued by some persons employed in the Treasury. "It is a general doctrine," says Judge Story, in his *Treatise on Agency* (§452), "that a principal is liable to third persons, in a civil suit, for the frauds, deceits, concealments, misrepresentations, torts, negligence and other malfeasances or misfeasances and omissions of duty of his agent in the course of his employment, although the principal did not authorize, or justify, or participate in, or indeed know, of such misconduct, or even if he forbade the acts or disapproved of them," etc. Now if the facts respecting these notes are as we understand them to be, they seem to furnish a case which a jury would be likely to consider a defense to the claim. The counterfeit notes have only been discovered by duplicate numbers, and the discovery has not been made until weeks after the conversion. The forged plates are most wonderful productions. The counterfeiters resemble the originals so closely that they escaped detection. All the minute and delicate workmanship, which was supposed to be the safeguard of the government obligations, is minutely and most carefully reproduced. Moreover the peculiar paper, manufactured expressly for government securities, is identical with the paper of these notes. Besides all this, it is said that they are printed from different plates, so that two plates must have been counterfeited. But the red stamp, we are told, is different, and does not agree, in several particulars, with the stamp used on the genuine notes. And yet it is the same in every respect, if we are not greatly in error, with the stamp

used for the legal tender notes. Now is it not inconceivable that, in counterfeiting the 7-30 stamp the workmen should have so altered it, in minute particulars, as exactly to reproduce the greenback stamp? Moreover, this discrepancy would perhaps render it impossible that photography had been made use of. If, then, all these and other circumstances are brought strongly before a jury, would they not be justified in finding that the notes were issued through the fraud of some of the Treasury employees, and would not the Court hold that the Government must bear the loss resulting from the fraud of its agents in the regular course of their agency?

OUR FOREIGN EXCHANGES SINCE 1861.

In order to estimate the importance of the change in our financial relations with Europe effected by the war, it is necessary to trace the course of our foreign trade during the last five or six years. The loss of the cotton crop, from the first outbreak of the war, involved an important diminution of our ability to pay for foreign products. This was naturally anticipated by our importers, and the importations were largely reduced; but the curtailment of our imports was not at all proportionate to the reduction in the exports. This was due in part to the fact that a large number of our producing population was taken into the army, thereby lessening the national yield of products; while, owing to the war consumption, we required more than the average supply of goods. Among the people also there was no disposition to economise; but, on the contrary, the effect of the increasing flood of paper money was to encourage the illusion among all of great prosperity, and thereby induce unusually large expenditures. Hence, although the war shut us off from communication with one third the population of the country, the importations were reduced only about 18 per cent. during the first year, and 24 per cent. the second year; while in the third, they were within \$5,000,000 of the figures of 1860. The exports, however, from being 400 millions in 1859-60, fell to 226 millions (gold value) in 1861-62, and even to 209 millions in 1864-65. Owing to the circumstance that the Custom House entries of domestic produce are given in currency, it is difficult to ascertain the gold value of the exports since the suspension of specie payments. By, however, carefully averaging the price of gold for each year, the value of this portion of the exports may be ascertained with a fair approximation to accuracy.

The average yearly price of gold has been about as follows: in the fiscal year 1861-2, 102; in 1862-3, 146; in 1863-4, 160; in 1864-5, 200, and in 1865-6, 140; for the year 1866-7 it is unnecessary to strike an average, as in the official returns these exports are reduced to gold values. Taking these then as the correct averages, we will find that the gold value of the exports of the last six years compare as follows with the imports.

Fiscal year,	Imports, (specie included.)	Exports, (specie included.)	Excess of Imports
1861-2	\$275,300,000	\$226,300,000	\$49,000,000
1862-3	252,900,090	243,600,000	9,300,000
1863-4	329,500,000	220,400,000	109,100,000
1864-5	234,400,000	209,400,000	25,000,000
1865-6	437,600,000	430,600,000	7,000,000
1866-7	412,200,000	355,200,000	57,000,000
Total.....	1,941,900,000	1,685,500,000	256,400,000
Average	323,600,000	280,900,000	42,700,000

According to these figures it appears that, for the six years ending on the 30th of June last, the trade balance against us was \$256,000,000 in gold. We have no doubt that this exhibit omits an important amount of the exports, inasmuch as the shippers' manifests, as presented to the Custom House, are generally more or less incomplete. It is, however, impossible to form any reliable estimate of the proportion thus excluded from the official returns. But, on the other hand, the high tariffs of late years have induced a considerable amount of smuggling, and have tempted importers, in many cases, to invoice their goods below the true value. The Secretary of the Treasury, in his last annual report, estimates that for smuggling, undervaluation of invoices and cost of transportation paid to foreign shipowners, 20 per cent. at least should be added to the imports. With due respect to official opinion, we are disposed to regard this estimate as somewhat exaggerated; but be this as it may, it may perhaps be safely assumed that the under-statement of the imports fully sets off the omissions in the entries of exports; so that the above balance may perhaps be taken as about representing the result of our trading account with the rest of the world. To this trading balance, however, must be added, an important amount for interest occurring upon foreign investments in this country. At the beginning of the war, the aggregate of our State, municipal, railroad and other securities held in foreign countries was estimated to be about \$250,000,000; which, some good judges believe, has since, through the shipment of bonds, been more than trebled. Assuming the accuracy of these figures, it could scarcely be supposed that the interest for the six years would be less than \$125,000,000. Adding then, this interest account to the adverse trading balance, it would appear that, for the six years, we have incurred a total foreign indebtedness of \$380,000,000. In this estimate we make no allowance for profits upon the invoiced value of our exports, nor for the sales of American vessels to foreigners pending the dangers from Southern privateers, so that we may perhaps reduce this total to \$350,000,000 as the best attainable estimate of the net adverse balance accruing on trading and interest accounts since July 1, 1861.

These figures may appear startling, and may seem to countenance the idea entertained in some quarters that there is outstanding against this country a large open balance ready to be called home upon any financial or political emergency in Europe, and threatening an embarrassing drain of gold. An idea of this sort has been the nightmare of the

Gold Room, and has created much, as it appears to us, unnecessary apprehension. We have little question but that nearly the whole of this balance has been set off by securities. It is not a supposition at all accordant with sound banking, much less with the caution with which financial operations have been conducted in Europe for the last eighteen months, to imagine that a balance running far up into the tens of millions would be allowed to accumulate here uncovered. With the constant danger of war in Europe, and the heavy losses connected with the cotton trade, it may be taken for granted that European bankers would not allow unusually large balances to remain here in the hands of their agents. Nor is there any palpable evidence that the foreign bankers of this city hold any such extraordinary balances as this supposition implies. If they were under advances to any very extraordinary extent to importers, banks or bankers, surely there would be more tangible evidence of the fact than is anywhere apparent. Nor is there any necessity for resorting to this extraordinary supposition; for it is not unreasonable to estimate that the Government and other securities sent abroad have realised sufficient to offset the balance against us. It is now very generally estimated among foreign bankers that the amount of United States bonds held in Europe cannot well be less than \$550,000,000. Of the whole issue of \$515,000,000 of Five-Twenties of 1862, probably there are at least \$450,000,000 in foreign hands, judging from the scarcity of the bonds in this market, notwithstanding they command 3@4 per cent more than other 6 per cent. bonds; and it cannot be an outside estimate to suppose that of Sixes of 1861, and Five-Twenties of 1864 and 1865 there is \$100,000,000 more held abroad. If to this \$550,000,000 of Government bonds we add say \$50,000,000, as a probable estimate for all other securities exported during and since the war, it would appear not improbable that we have sent out, as an offset to this balance, about \$600,000,000 of securities. What the export of these securities has realised we have no means for knowing. In order to cover the adverse balance, they would require to have realised upon an average sixty cents on the dollar, in gold; which is perhaps just about the figure at which most parties familiar with the course of the foreign bond market would estimate the average cost of our securities to European holders.

We make no pretensions to precise accuracy in these estimates, for, in the absence of records, precision is out of the question. If we have succeeded in giving very probable guesses, then we have contributed something toward divesting a very important question of much vagueness and misapprehension.

THE ROUTES OF THE PRECIOUS METALS.

Considering the close economy which regulates the movements of the precious metals, it is remarkable that bankers have never yet attempted to remedy the losses arising from the circuitous routes by which gold and silver find their way from the countries in which they are mined to their final reservoirs. At the present time London is the great distributing centre. She has received for the last two years, chiefly from California, Mexico and Australia about \$135,000,000 of gold and silver, and of that amount has exported about \$90,000,000, or two thirds. The ultimate destination of a large portion of these exports is the East, part being shipped direct from London, and part by way of Mediterranean ports. During the last two years, the specie shipments from Southampton and Marseilles, by the steamers of the Messageries Imperiales and of the Peninsular and Oriental Steamship Company, have averaged \$60,000,000, an amount much below the average of the five preceding years. Of this amount more than one-half has gone to India, one-fourth to Egypt, and the remainder to China and other minor points. The East is thus swallowing up nearly one-half of the current production of the precious metals.

It is of course a matter of much consequence to the foreign banking interest at large that this immense amount of gold and silver, by which Eastern products are paid for, should be removed from the point of production to its final destination at the lowest possible cost, and with no unnecessary loss of time. According to the present route of distribution, California gold is shipped from San Francisco to London, partially direct and partially by way of Panama and New York, and then from London to the East--a strange and costly zig-zag, passing through 100 degrees of longitude and 200 of latitude. The Australian product is shipped chiefly to London direct, and thence takes the eastern direction; the route from the mines to the final reservoir, being in this case through 230 degrees latitude and 120 of longitude. Now, between Melbourne and Madras a direct route covers only 60 degrees latitude and 50 longitude; while a direct route between San Francisco and Madras would pass through 160 degrees latitude and 28 degrees longitude. The distances of the present indirect route and of a direct route, between Melbourne and Madras, and between San Francisco and Madras, respectively, therefore compare thus:

		Direct route, degrees.	Indirect route, degrees.
San Francisco to Madras.....	{ latitude'.....	160	200
	{ longitude.....	28	100
Melbourne to Madras.....	{ latitude.....	60	230
	{ longitude.....	50	120

A mere glance at these figures will show that the present routes of distribution involve a very heavy loss in the costs of transportation and of interest, as compared with what would obtain in the event of the adoption of the more direct lines of shipment. Until now, the direct route between California and the East has been unavailable for European

remittances, from the lack of adequate transportation and telegraph facilities. The Atlantic Cable and the opening of steam navigation between San Francisco and Hong Kong have totally changed the conditions of this question; and we cannot see what reason can be assigned why that portion of the California product which has usually gone to Europe should not take a direct route to the East. The steamers of the Pacific Mail Steamship Company now make the voyage to Hong Kong in about 25 days. A banker in London or Paris has but to transmit an order by cable to his agent in New York to remit gold on his account to, say, Madras; the New York house may telegraph to its agent in San Francisco to make the remittance to Hong Kong by steamer, en route to Madras; the gold is taken by the next steamer from Hong Kong to its destination; and is in the hands of the receiver within forty days from the date of the order for remittance. We think it is demonstrable that remittances made in this way would be attended with a very large reduction in expenses. As nearly as we can ascertain, the following would be the chief items of expense in the transportation of silver by the respective routes:

SAN FRANCISCO TO INDIA VIA LONDON.

Freight from San Francisco to London.....	1.96 per cent.
Insurance " "	90 "
Freight from London to China.....	2.00 "
Insurance " "	1.00 "
Commissions at London.....	25 "
<hr/>	
Total costs.....	6.01 per cent.

SAN FRANCISCO TO INDIA VIA HONG KONG.

Freight from San Francisco to Hong Kong.....	1.57 per cent.
Insurance " "	79 "
From Hong Kong to Madras, say half these rates...	1.18 "
<hr/>	
Total from San Francisco to India.....	3.54 per cent.
Deduct interest for difference in time.....	40 "
<hr/>	
Total	3.14 per cent.

There is a slight difference in favor of London in the cost of refining: allowing for which, it would appear that the balance in favor of direct shipment is about 2.97 per cent. Had the comparison been made between direct shipment and the Panama, New York and London route, which is the most general line of treasure transportation, the difference would have been still greater in favor of New York.

We cannot but think that the intelligent economy of foreign bankers will soon cause them to appreciate the great advantage opened through the connecting of Great Britain and the Continent with the East by telegraph and steamer. Already there are symptoms of an inclination to try the direct route. The steamer sailing from San Francisco to Hong Kong, Sept. 3d, took out \$980,000 in treasure, and that sailing on the

14th of October \$1,080,000; which, together, are equal to about four months' ordinary shipments in that direction; and yet the amounts taken by sailing vessels are about up to the average. As the number of steamers on the route is increased, this movement may be expected to increase, until ultimately the whole of the California surplus takes that course to the East; and when the Pacific Railroad is completed, a portion of the gold and silver product of the territories will also find its way to San Francisco to aid in satisfying the Asiatic consumption. This new drift of the gold current foreshadows an important diversion of exchange operations from London to New York, to be followed by a large accession to the monetary power of this centre. For a time the London banking interest may cling to the old routes, but competition will not be slow to avail itself of the important economy in remittances offered by the new line. Our own payments for imports of India and China products especially cannot long continue to be made through London; bills upon San Francisco being equally available as bills on London, and on more favorable terms.

RENSSELAER AND SARATOGA RAILROAD.

From Troy, Albany and Schenectady there extends a series of railroads, which find their termini at Whitehall at the head of Lake Champlain, and at Rutland, Vt., where a connection is made with the roads leading north to Canada and east to Boston. These lines occupy in the railroad system of New York a position which secures to them an extensive control over the valuable traffic between the St. Lawrence and the Hudson—the ports of New York and Montreal. The branch connecting with the Erie Canal at Schenectady is chiefly valuable for freighting Western produce to the eastern consuming centres.

Until recently these several lines were owned by different companies, and operated as competitors one against the other for what under a recent consolidation of interests has become an undivided commerce.

The consolidation here spoken of, includes the Rensselaer and Saratoga, the Saratoga and Whitehall, and the Troy, Salem and Rutland companies, the consolidated capital of which is placed at \$2,500,000. The funded debt of the new company amounts to \$1,500,000. The total length of the companies lines is 134 miles; and under perpetual leases the same company is operating the Saratoga and Schenectady, the Albany and Vermont and the Rutland and Whitehall railroads together 41 miles—making the total length of road operated 175 miles, not including over 21 miles of second and side tracks. The company also owns the toll bridge across the Hudson at Troy, of which the average net income is about \$20,000. The total cost of all the property, including rolling stock, was originally \$6,945,392. As now consolidated and capitalized the value of the property and leases of the company is placed at \$4,713,071, showing a surplus above cost in favor of the consolidation amounting to \$2,232,321.

The gross earnings of the lines now consolidated were in 1862 \$566,074; in 1863, \$712,801; in 1864, \$966,608; in 1865, \$1,095,919, and in 1866, \$1,301,-

922. After paying operating expenses and lease rents (\$69,592 per annum,) the consolidation has divided on the average $7\frac{1}{2}$ per cent. per annum to the stockholders.

The steady and regular increase of the business of these roads, both before and since the consolidation of 1865 (now being perfected by the issue of consolidated stock) has been partly owing to the development of the local business of the lines and partly to the increased closeness of the connection between the company's roads and the Rutland and Burlington and the Troy and Boston Railroads, growing out of contracts with those companies, by which the business of the "North and South Through Line," between the Hudson and Montreal, and the "East and West Through Line," between Schenectady and Boston is done, entirely over the roads of the Rensselaer and Saratoga companies. The transportation of freight and produce by the East and West Line is rapidly increasing. Starting from Schenectady (where extensive improvements have been made for transshipping from the canal to the railroad) the route is *via* Whitehall, Rutland and Fitchburg. Though somewhat longer than the route by canal from Schenectady to Albany and thence by the Western Railroad, it is asserted that the cost of transportation is much less. By this route, indeed, twenty-eight canal lockages are avoided, and also the less facile means of transshipment at Albany.

The East and West line also connects at Schenectady with the Central Railroad, and forms part of one of the great trunk lines between Boston, Chicago and St. Louis, by which freight and passengers are carried without breaking bulk or changing cars, and as promptly as by the Western railroad.

The results of the consolidation of these lines under a single administration, as appears from the rapid development of their business during the last few years, are satisfactory; but are simply a repetition of those which have occurred in nearly all previous instances of railroad consolidation. Harmony of action is the necessary element to success for business, and this is seldom found where two or more heads govern. By consolidation the gross earnings are increased under improved management, and the costs of operating and administration are reduced to a minimum. The success of the Rensselaer and Saratoga Railroad in its consolidated capacity is a conspicuous instance of the beneficent effects of the unity of purpose and action thus obtained.

PROSPECTS OF THE GOLD PREMIUM.

In a previous article we have reviewed the course of the foreign trade of the country for the last six fiscal years, and showed that, although a large adverse balance had accumulated upon the trading account, yet there was good reason for considering that the debt had been set off by the export of securities, and that consequently the condition of our foreign balance gives no countenance to the supposition that we are liable to an excessive drain of specie in settlement of our foreign account. This consideration is chiefly important as bearing upon the prospective price of gold; and we now propose to supplement it by a survey of such

other circumstances as may be deemed likely to affect the premium during the next few months.

The principles mainly regulating the value of gold, aside from the currency question, are the standing of the public credit, the supply of the precious metals and the demand for them—the supply and demand not only actual but prospective or estimated. Let us then scan the future with regard to these general considerations.

For some time past there has been a concurrence of circumstances tending to elevate the standing of the Government credit. As the most recent, we may specify the result of the late elections; which may be viewed not only as removing the dangers of impeachment, but also as signaling a reaction from extreme political measures, and as favoring the cultivation of a more harmonious sentiment toward a late hostile section. The National finances also have exhibited an improvement unequalled in the history of any nation similarly circumstanced. Since the close of the last year of the war we have reduced the net debt 225 million dollars, and we have converted into a permanent form upwards of 500 million dollars of short obligations, which have been regarded as the principal danger of embarrassment connected with the finances. Our revenues have been overflowing; and yet, with much depression in business, the people have shown no impatience under the public burthens. In the ordinary course of affairs we shall find ourselves, nine months hence, with the entire short debt funded into twenty-year obligations, or otherwise permanently disposed of; and that which has always been regarded as the chief obstacle to the resumption of specie payments will thus be removed. The greenback circulation has been contracted from 424 million dollars in January, 1866, to 357 million in November, 1867; and the continuance of the monthly contraction of four millions to the close of the current fiscal year would reduce the total to 325 million dollars. This large reduction in the demand obligations has, of course, a most direct tendency to inspire confidence in the ability of the Government to redeem its promises; and the more so because the reserve of coin in the Treasury is at the same time accumulating, and in July next is quite likely to amount to about 30 per cent. of the greenback circulation.

The importance of these facts has been lost sight of in the excitement attending the vicissitudes of foreign and domestic politics; and it would seem that the public must soon wake up to the consciousness that we are being brought to the resumption of specie payments much more closely than they had supposed. From these considerations it is manifest that the firmness of the premium for some months past has been in opposition to the course of the public credit.

And next, as to the supply of precious metals. On the 31st October there was in the Treasury 14 million dollars of private coin on deposit; and on the 1st inst. 25 million dollars became due to the holders of coupons, making, together, 39 million dollars in the hands of the public; to which may be further added, say, 4 million dollars of coin proper in the banks. On the 1st of January about 20 million dollars will become payable on coupons, and 9 million more in redemption of United States Sixes of 1867. In view of the large payments on January 1st, it is probable that the Treasury may not sell gold to the average extent

during the interim; and yet from the low state of the currency balance it may be found necessary to sell a portion of the customs receipts, say six millions for the two months, or half the average rate. This being the case, we should have a total supply from November 1st to January 1st of about 78 million dollars, an amount in the hands of the public unequalled at any period within the last four years, and more than double the average supply for many months past.

What are the prospects of the demand? The course of foreign trade is not favorable to the anticipation of any important demand for exportation. Last year, our imports at this season were unusually heavy, while our exports, except of cotton, were exceptionally light. This season the imports are light, under a reaction from the over-importations for the Spring trade; and as the results of the Fall trade are far from satisfactory, and trade is generally depressed, it is quite likely that the orders for Spring importation will also be on a strictly moderate scale. Our harvests have given us a liberal surplus of breadstuffs, which is likely to be bought by Europe at high prices; while our surplus of cotton will be somewhat larger than last year, though ruling at lower prices. The exports of flour at New York from the beginning of August to the close of October were, this year, 320,000 bbls., against 215 000 bbls. for the same period of last year; and of wheat 2,071,000 bu hls, against 171,000 bushels last year. For the same period the imports at this port were this year 60 million dollars against 78 million last year; and the total exports 41 million dollars against 39 million last year. These facts indicate a very important change in the course of trade from this period of 1866, and so far indicate a probability that less than the usual amount of specie will be required for adjusting the excess of imports over exports of produce and merchandise. From the moderation of the imports it follows that the demand for coin for customs duties will fall below the late average. This, however, is not a consideration really affecting materially the supply of coin; for if the receipts of the Treasury are diminished, its sales will also be to a corresponding extent curtailed. The position of affairs in Italy has quieted the fears of an outbreak of a foreign war, and hence at the financial centres of Europe there is a more hopeful feeling than prevailed a few weeks ago; facts which are calculated to allay the apprehensions of a return of our securities and a calling home of balances which have been excited in some quarters by the unsettled condition of European politics.

From a survey of the whole question, therefore, it would appear that the gold premium is now freed from a combination of influences which for some months have been steadily fostering its inflation, and that, for the immediate future at least, it will be more fully regulated by the improving condition of the finances and the contraction of a redundant currency.

CROPS OF 1866 IN EUROPE.

At the present moment, when the condition of the breadstuffs market in this country and in Europe is regarded with so much interest, the statement which follows will furnish some valuable information as to the crops of the several countries of western and central Europe in 1866. These figures are furnished by Dr. F. B. W. Von Hermann, of the Bavarian Bureau of statistics.

Crop of cereals in the countries named in 1866 :

Countries.							Potatoes. bushels.
Austria.....	80,428,000	107,076,000	24,894,000	77,530,000	83,908,000	166,804,000	198,230,000
Prussia.....	13,792,000	103,476,000	.....	.....	32,308,000	117,974,000	214,506,000
Saxony.....	4,914,000	9,760,000	.....	.....	4,296,000	19,790,000	23,978,000
Wurtemberg.....	7,878,000	2,076,000	7,740,000	.....	6,276,000	9,643,000	23,264,000
France.....	267,198,000	68,180,000	23,063,000	23,508,000	46,260,000	166,678,000	154,144,000
Belgium.....	17,178,000	16,860,000	9,490,000	.....	4,243,000	30,028,000	73,064,000
Holland.....	3,900,000	8,616,000	.....	.....	2,600,000	10,194,000	42,944,000
Ireland.....	3,683,000	168,000	.....	.....	6,190,000	57,144,000	80,296,000
Bavaria.....	16,684,000	29,388,000	.....	.....	16,678,000	24,634,000	61,712,000

The same per acre is shown in the following :

	Wheat.	Rye.	Mixed grain.	Maize.	Barley.	Oats.	Potatoes
Austria.....	16.84	14.02	15.45	81.50	15.34	35.40	.....
Prussia.....	19.67	9.45	.....	.....	26.60	21.78	64.46
Saxony.....	24.76	25.04	.....	.....	30.66	39.14	19.58
Wurtemberg.....	15.16	20.19	17.04	.....	27.34	30.60	119.22
France.....	15.05	12.67	15.69	15.36	18.14	20.80	77.26
Belgium.....	21.60	22.38	22.98	.....	36.66	27.80	196.73
Holland.....	19.16	16.48	.....	.....	23.80	34.78	162.66
Ireland.....	15.16	18.21	.....	.....	27.29	30.86	79.20
Bavaria.....	15.10	16.14	.....	.....	19.98	21.98	268.94

The following shows the number of bushels produced, deducting seed, to each 1,000 of the population :

Countries.	—Bushels for 1,000 inhabitants, deducting seed.—				Bushels of oats for 1,000 horses, deducting seed.	
	Wheat spelta.	Rye.	Maize, all in rye.	Barley.		
Austria.....	1,866	2,373	1,644	7,333	1,816	29,768
Prussia.....	1,176	4,818	.....	6,563	1,140	60,328
Saxony.....	2,148	4,088	.....	7,410	1,890	114,743
Wurtemberg.....	3,816	1,008	.....	7.28	2,036	93,694
France.....	6,064	1,566	1006	11,893	1,123	60,473
Belgium.....	3,373	2,893	.....	8,633	834	63,138
Holland.....	1,050	2,246	.....	2,634	964	25,304
Ireland.....	828	94	.....	3,734	774	79,026
Bavaria.....	2,778	4,128	.....	8,298	2,958	51,248

The same authority gives the following as the number of domestic animals for each 1,000 inhabitants of the same countries.

	Horses.	Cows.	Sheep.	Hogs.	Horses.	Cows.	Sheep.	Hogs.
Austria.....	642	1,153	3,006	1,500	Belgium.....	366	876	774
Prussia.....	576	1,068	6,114	988	Holland.....	444	1,704	1,568
Saxony.....	276	1,176	1,868	696	Ireland.....	630	1,738	3,600
Wurtemberg.....	336	1,636	2,388	756	Bavaria.....	468	1,966	2,634
France.....	480	772	6,590	1,832				

MEMPHIS AND CHARLESTON RAILROAD.

In a previous number of the MAGAZINE we gave a historical review of this railroad up to the close of the fiscal year 1865-66. At that time the road was still in an incomplete condition. In July (7th) the bridge over the Tennessee River at Decatur was completed, and trains commenced through operations.

The following account shows the gross earnings and cost of working the road in the fiscal years ending June 30, 1866 and 1867, comparatively :

	1865-66.	1866-67.	Increase.	Decrease.
Receipts from passengers.....	\$583,157 64	\$910,799 08	\$328,641 89	.....
" From freight.....	589,916 63	636,886 85	46,970 23	.....
" Mails.....	20,506 43	27,799 63	7,293 19	.....
" Express.....	51,092 50	76,730 00	25,637 50	.....
" Rents & privileges.....	30,623 91	9,406 93		21,216 98
Total receipts.....	\$1,274,307 10	\$1,661,613 48	\$387,306 38	.....

From which deduct operating expenses, viz. :

Conducting transportation.....	\$303,498 05	\$324,095 09	\$20,607 01	.....
Motive power.....	379,896 51	388,848 33		41,017 99
Maintenance of way.....	577,631 87	329,497 00		248,134 87
" cars.....	92,078 30	111,984 36	19,906 06	.....
Total expenses.....	\$1,353,061 26	\$1,114,424 97		\$238,709 29
Excess of receipts.....		\$547,187 46	\$536,014 69	.....
Excess of expenses.....	\$78,757 16			.....

Of the expenses in 1865-66, \$702,899 33, and in 1866-67, \$475,697 77 were extraordinary, and made for permanent improvements and equipment. Deducting these, the net earnings in 1865-66 would be \$624,142 17, and in 1866-67 \$1,022,885 23.

The total fiscal operations of the company, as exhibited on the profit and loss account for 1866-67, are shown in the following abstract :

Passenger receipts.....	\$910,799 08	Expenses.....	\$1,114,424 97
Freight receipts.....	631,896 85	Interest on bonds.....	192,418 00
Mail and express.....	104,519 63	Discount on bonds sold.....	179,845 00
Rents and privileges.....	9,406 93	Balance from last year.....	78,464 64
Interest and exchange.....	23,865 38	Balance to credit.....	190,335 30
Total.....	\$1,686,477 81	Total.....	\$1,686,477 81

The road, with its branches, has a length of 295 miles, and including 37 miles of the Nashville and Chattanooga, the total length operated by the company is 332 miles. The average length operated in 1865-66 was less than 260 miles. The rolling stock on the 1st July 1866 and 1867 consisted of the following :

	Locomotive engines.	1st class pass. cars.	Mail & bag'ge.	Box freight.	Flat cars.	Stock cars.	Wreck Road & hand cars.
1866.....	53	24	19	219	111	9	79
1867.....	55	23	23	209	113	4	85

Of the engines in 1866, only 18 were in good order and 13 on running order; in 1867 there were 24 in good order and 16 in running order. Of the numbers stated in the table there were still on Southern roads, in 1866, five, and in 1867, three.

The number of miles run by engines with trains in the two years 1865-6 and 1867-7 compares as follows :

	Passenger.	Freight.	Others.	Total.
1865-6.....	137,570	166,562	100,519	405,051
1866-7.....	259,193	272,318	154,821	786,331

These statistics exhibit a great improvement in the business of the road, and speak well as to its management and capacity. With increased rolling stock, which is now being provided, and a full settlement of old accounts, this road will assert once more the favorable, financial position which its geographical direction assures to it. The financial condition of the company at the close of

the two fiscal years (June 30, 1866 and 1867,) is compared in the following statement :

	1866.	1867.	Increase.	Decrease.
Capital stock.....	\$5,812,735 00	\$5,812,735 00	\$.....	\$.....
Company bonds.....	1,294,000 00	1,531,000 00	237,000 00	.....
State of Tennessee.....	1,591,990 00	1,596,530 00	3,540 00	.....
Floating debt.....	1,462,814 87	921,937 12	.....	540,877 75
Receipts.....	1,422,869 23	1,685,477 81	262,615 58	.....
Total.....	\$11,093,591 50	\$11,046,669 98	\$.....	\$47,921 52

Against which are charged as follows, viz. :

Construction proper.....	\$5,643,551 74	\$5,969,003 62	\$325,452 88	\$.....
Incidental to const'n.....	322,643 33	294,531 76	1,939 44	.....
Equipment.....	844,233 77	1,002,601 23	158,317 45	.....
Total.....	\$6,810,429 83	\$7,266,136 60	\$475,694 77	\$.....
Interest, expenses, &c.....	\$740,744 98	\$1,426,937 97	\$745,943 04	\$.....
Stocks and property.....	448,923 44	433,836 18	.....	10,166 26
Coupon bonds.....	1,380,000 00	1,179,600 00	.....	200,400 00
Other assets.....	840,157 19	426,961 15	.....	.....
Profit and lo-s.....	804,081 68	78,464 64	.....	725,616 04
Cash on hand.....	69,443 68	82,032 99	12,589 31	.....
Total.....	\$11,093,591 50	\$11,046,669 98	\$.....	\$47,921 52

THE BEER TRADE IN GERMANY.

The manufacture and consumption of beer is increasing on the Continent, and it is supposed the large consumption at the Paris Exhibition will still further extend its use. The finest temple ever dedicated to King Gambrinus is in the Austrian part of the Exhibition park. It is a very large wooden building, of simple but admirable construction, with a light roof showing the timbers, and a broad gallery round the interior. It is well lighted and ventilated, and those who prefer the open air find plenty of accommodation under the spacious verandahs outside. The brewery to which this establishment belongs is the largest in Austria, and indeed on the Continent.

THE VIENNA BREWERIES.

The principal brewery in Austria is at Klein-Schwechat, near Vienna, and was established in 1632; but its importance dates only from 1833, when the late proprietor, Mr. Anthony Dreher, took possession of it.

Previous to this latter date the only beer brewed there was *obergahrig*, a highly fermented beer, which would not keep, but was consequently drunk at an early age. Mr. Dreher thoroughly revolutionized the brewery, formed immense store cellars, and introduced the slowly fermented lager beer, which soon grew into enormous popularity. During the first year of the reign of Mr. Dreher the quantity made at Schwechat amounted to 330,937 gallons.

In the year 1850 the brewery became totally inadequate to the supply required; the premises were extended, and machinery introduced instead of manual labor. Soon after this Mr. Dreher purchased a domain near Saaz, famous for its growth of hops. He laid out an extensive hop plantation, and also built a brewery there, according to the modern system.

In 1862 he purchased the landed property of Steinbruch, near Pesth, and erected a store brewery, answering all the modern demands. He had accordingly three large breweries.

The Schwechat brewery is the largest on the continent. Including malt floors, it occupies an area of twenty-one and one-third acres. Fourteen and a quarter acres are covered with vaults. The daily consumption of malt, made in the winter, is 1,500 bushels, requiring floors of six and one-third acres of area, and a storeroom for 18,000 bushels of raw barley, and magazines for storing 60,000 bushels of malt. Machinery is employed to convey the dry malt to the bruisers or crackers, and thence to the boiling-house, in which latter are six copper pans, the largest holding 6,230 gallons.

During the working months the make amounts to 47,348 gallons of beer daily. The fermenting rooms hold 1,246 vats, holding 654,773 gallons.

In the subterranean cellars, which together occupy an area of $3\frac{1}{4}$ acres, there are 4,317 barrels or tuns, holding from 500 to 2,500 gallons each, or 5,160,869 gallons of beer in all.

At the side of the cellars, and in immediate connection with them, there are ice-pits of more than two acres area, in which 40,000 tons of ice can be stowed away.

In the works are employed three fixed and one portable steam engine, and one hydraulic engine; together 80 horse power.

They employ 350 brewers and brewers' assistants, and 250 draymen and laborers. Rails run through the whole establishment, and are connected with the railroad. The stables contain 72 horses and 240 dray-oxen.

From the 1st January, 1866, to 1st January, 1867, 5,989,148 gallons were produced, yielding a revenue to the government from this single brewery of nearly \$488,000.

In the Saaz brewery, built by Mr. Dreher according to the new system in the year 1861, the working is not confined to the winter months, but continues the whole year round; only the summer months are devoted to the brewing of tapping beer (Schank-beer), a beer peculiar to Bohemia, while the winter months are devoted to brewing lager-beer.

To effect the summer brewing without injury to the quality of the beer, very effective cooling apparatus is employed. The fermenting cellars are so abundantly supplied with ice that the temperature in them does not exceed 43 to 50 degrees of Fahrenheit, even in the hottest summer months, and in the store cellars the temperature is constantly kept to about 36 degrees Fahrenheit. The prize for beer at the Paris Exhibition was gained by the Schwechat brewery.

The three breweries named yield a yearly income to government of \$628,855.

THE MUNICH BREWERIES.

These statistics of the great Austrian breweries cannot be matched on the Continent; but Munich is better known as a brewing region than Vienna. The breweries of Munich are freely thrown open to young brewers, and 30 years since Dr. Kaiser, technological professor in the University of Munich, established a course of scientific lectures on the subject, which have been attended by more

than a thousand young men. One of the famous Bavarian breweries in Munich has given practical instruction to more than 300 of these pupils.

The production of beer has been doubled in Bavaria in 30 years, and at the same time the number of breweries has diminished; machinery has to a great extent replaced hand labor, and this has led to the formation of very extensive establishments.

THE KING OF BAVARIA A BREWER.

In Munich there are 16 breweries in operation, 2 of which are worked for account of the King of Bavaria, 13 belong to private individuals, and 1 to a monastery. Nuremberg has 24, and Augsburg 71. In point of quantity of beer Munich outstrips all her competitors.

BEER AND WINE.

While the manufacture and consumption of beer is rapidly increasing, wine is quickly decreasing. Twenty years ago there were in Lower Austria 80,000 yochs or 120,000 acres of vineyards under cultivation, which produced annually 2,000,000 eimers or 30,000,000 gallons of wine. There are now only 66,000 yochs of vineyards, producing 1,000,000 eimers or 16,000,000 gallons.

During the same time the manufacture of beer has increased from 1,400,000 eimers or 21,000,000 gallons, to 1,900,000 eimers, or 43,000,000 gallons, being more than double. This last quantity was brewed in 1865; and by the former years' rate of growth it may safely be calculated that the consumption now amounts to 52,000,000 of gallons.

There are at present 114 breweries at work, employing 1,500 workmen, and have 30 steam engines of 750 horse-power. Each workman produces 2,000 eimers, or 30,000 gallons of beer yearly. The workmen's wages are 1 to 1½ florins per day (50 to 75 cents), with board and lodging.

WESTERN NORTH CAROLINA RAILROAD.

The Western North Carolina Railroad extends from the important city of Salisbury westward to Morgantown 78 miles. To the latter point the road was completed before the late war broke out, as was also a branch from the main line to Newtown.

Among the several great lines of railroad which are intended to connect the Southern Atlantic seaboard with the Ohio and Mississippi, and the vast producing countries north and west of these rivers, this railroad occupies a geographical position which will make it a significant competitor for the rich commerce which the completion of the system of which it is a member will undoubtedly develop and be supported by. This system commencing at Morehead City, on Beaufort Harbor (the best port south of Cape Hatteras—deep, capacious, and of fine approach from the sea), will be extended through the length of the State, and on the edge of Tennessee connect with the system of the latter State. The first link in this chain of communication is the Atlantic and North Carolina Railroad, from the harbor aforesaid to Goldsboro, a distance of

ninety-five miles; thence the North Carolina Railroad extends to Salisbury a further distance of 180 miles, and lastly comes the Western Railroad already completed to Morgantown 78 miles. Had construction not been arrested by the war this road would by this time have been open to traffic to the Western line, an additional distance of 106 miles—making a total length through the State of 459 miles.

This great thoroughfare may be considered as the main artery of the State. Connecting roads carry it towards Richmond and Norfolk, and at Charlotte it connects with the system of South Carolina. The principal engineering difficulty yet to be encountered will be found in the mountain region which divides North Carolina and Tennessee, but even here there are several passes which will afford the requisite grades for easy working, that of French Brook being the one chosen for this railroad.

Whatever may be the destiny of the line as a thoroughfare however, there appears to be a sufficient local business for its support. The Atlantic and North Carolina, and the North Carolina railroads, have both done well in spite of the difficulties engendered by the late hostilities. The further extension of such a line must always be adding to its productiveness, and when the great West is pierced a large portion of its trade will come directly east to the Southern ports, rather than by the more roundabout avenues from the interior to the northern and middle seaboard. A glance at any good map must convince the most sceptical on this point.

The Western Railroad (between its present termini) was built at a total cost of \$2,227,000, which sum includes cost of rolling stock. This is about \$27,500 per mile. The western continuation may cost a larger sum per mile, and probably will. But when constructed, the capacities of the road will be larger. We have said this much in relation to this railroad because we find its position to be excellent (as we have already stated), and because we believe that the interests of the very extensive country through which it it will pass, demand its immediate construction.

So far as built (81 miles) it has been constructed on share capital. The company have no funded debt; their only liability amounts to about \$64,000 floating debt.

ARTIFICIAL MEERSCHAUM.

Artificial meerschaum is now prepared for commerce, according to the Chemical News, by mixing 100 parts of silicite of soda, at 35 degrees, with 60 parts of carbonate of magnesia and 80 parts of native meerschaum or pure alumina—the mixture to be carefully pulverized, finely sifted, boiled with water, and placed in porous moulds. It is presumed the “silicate of soda at 35 degrees” means silicate which, when in solution, would stand at 35 degrees Beaume; and the further presumption is in order that much of the “genuine meerschaum” displayed in big windows of pipe manufacturers is mixed according to the foregoing, or some other recipe.

CONSEQUENCE AND DIVERGENCE OF WESTERN TRADE.

The causes which serve to concentrate the traffic and travel between the East and the West, upon the great lines of railroad near the southern shore of the great lakes will continue to operate in a constantly increasing ratio under the influence of the rapid growth of the West and the Northwest, and the extension of the Pacific Railroad. Much of the freight designed for the Southwest, and which leaves the east and west routes at various points as far west as Chicago, will undoubtedly continue to find a channel by way of St. Louis; and the marvelous career of growth and prosperity upon which the States of Arkansas and Texas and Southwestern Missouri have entered or about to enter, under the influences of peace and a restored Union, will insure for our neighboring city on the Mississippi a commercial future of wonderful prosperity and splendor. Hannibal, Quincy, Keokuk, and Burlington, on the north, and Memphis and Cairo on the south, will no doubt dispute and divide this trade with the "Mound City" with more or less success; but the latter will undoubtedly retain its pre-eminence as against those for a long time to come, if not permanently. But, so far as the traffic of the West—the wide and rapidly developing fields of Wisconsin, Iowa, Minnesota, Nebraska, Kansas, Colorado, Dakota, Montana, &c., is concerned, it is evident that there will be an increasing tendency to concentrate at Chicago, both as a starting and receiving point, as well as in transit. The geographical configuration of the country, no less than the great lines of traffic and travel already constructing, have determined that here, at the lower point of Lake Michigan, must the vast and expanding commerce of the West and Northwest converge, meeting the returning tide from the East, just as certainly as Egyptian Alexandria monopolized the trade between Europe and the Indies two thousand years ago. And a few years hence, when the completion of the Pacific railroad shall have furnished an unbroken line of communication between the Atlantic and Pacific shores, it must become, not merely to a much larger extent than ever before the center of trade for the Mississippi Valley and the region of the Lakes, but also the great interior mart for the exchange of the commerce of two hemispheres.—*Chicago Republican*.

THE GRASSHOPPER ARMY.

The grasshoppers and dog-fennel are about taking Iowa, and would probably, succeed but for the fact that the former are "death" on the latter, and gobble it up "root and branch" as fast as they can get to it. Having rollicked around over Western and Southern Iowa until they have grown tired of the scenery and needing a change of pasture, they are coming "thisward," and the advance guard of the chattering hosts are only twelve miles from our city gates.

In conversation with Mr. Godfrey Jerue, of Guthrie county, one of the wounded heroes baptized in his own blood at Missionary Ridge, and a perpendicular Radical who draws a weekly draught of sound doctrine from the Register, we learned yesterday that the locusts are literally swarming over Beaver Thompson and Guthrie Center townships of that county. They are of the

small, gray pattern, and seem to have no particular "tooth" for corn blades, and have, in many fields, stripped the stocks entire'y, leaving nothing but the "bare pole" and the ears, which make a most awkward appearance, dangling "alone in their glory." Instead of being a damage to the corn, they are a benefit to it, as they check the growth and hasten the maturity of the grain. Mr. Jerue arrived in this city yesterday morning, having come straight through from Guthrie Center, by the Adel road. Around Adel they are doing no damage, but seem to be having a general hopping-around time, without harming anything. Our informant states that he could see them all along the road until within eleven or twelve miles of Des Moines. With fair winds they will probably reach here soon, when they will be able to tell their own story.—*Des Moines (Iowa) Register, September 16.*

STOCKS OF MERCHANDISE AT NEW YORK.

The following is a statement of the stocks of leading articles of merchandise at New York at the dates named :

	1867		1866
	Oct. 1.	Nov. 1.	Nov. 1.
Beef, tierces and barrels.....	544	15,109	10,834
Pork, barrels.....	62,797	47,457	53,397
Tobacco, foreign, bales.....	3,669	4,759	9,300
Tobacco, domestic, hogsheads.....	80,871	29,888	26,890
Coffee, Rio, bags.....	68,088	106,902	39,517
Coffee, other, bags.....	12,910	23,744	27,794
Coffee, Java, mats.....	14,490	7,245	15,000
Sugar, hogsheads.....	46,774	27,896	49,750
Sugar, boxes.....	59,694	47,294	41,234
Sugar, bags.....	30,190	29,519	58,140
Molasses, hogsheads.....	8,615	8,080	7,915
Hides, No.....	142,100	174,200	49,000
Petroleum, crude, barrels.....	5,685	24,900	17,739
Petroleum refined, barrels.....	24,580	44,319	56,381
Cotton, bales.....	50,000	29,677	79,000
Rooin, barrels.....	33,508	78,911	60,707
Crude turpentine, barrels.....	828	603	161
Spirits turpentine, barrels.....	4,222	4,181	4,256
Tar, barrels.....	1,048	1,085	3,625

SAN FRANCISCO BULLION MOVEMENT.

The supply of bullion during the past nine months has been as follows :

	1866.	1867.
Imports.....	\$1,017,123	\$1,655,806
Coastwise receipts.....	4,699,606	4,419,856
From Northern mines.....	29,775,101	81,973,874
From Southern mines.....	3,418,456	8,223,853
Total.....	\$38,910,186	\$41,407,089
		33,910,286

Increase nine months, 1867..... \$2,496,803

This does not represent the whole production, but simply the receipts from Wells Fargo & Co. The receipts in October, since the close of the above table, are about \$1,000,000. The exports in the same period have been as follows :

To	1866.	1867.
New York.....	\$928,708 43	\$595,366 96
England.....	100,767 75	154,988 30
Panama.....	5,070 00	5,000 00
Acapulco.....	3,504 00	.....
Total.....	\$1,038,050 18	\$755,355 26

Honolulu.....	40,000 00	.....
China.....	806,858 01	.....
Previously.....	23,724,067 05	20,607,453 65
Total since January 1.....	\$24,107,070 23	\$21,222,708 31

A CANAL FROM THE MISSOURI TO THE GULF.

As everything relating to the improvement of the "Father of Waters" is of interest, we publish the following. It has been published by Dr. John H. Henry, and may be pronounced as a decidedly grand scheme. He says:

Let the nation be made a great workshop for its laborers, which would not only revive the prosperity of the South but the whole country, enabling the people to pay and bear the burden of taxation.

We propose by government assistance to unite the waters of the Missouri river with the waters of the Gulf of Mexico, through a new and safe channel, beginning with a canal at Kansas city, on the Missouri river, running to a branch of the Osage, connecting by canal with the Neosho river at the falls running two hundred and fifty miles or more to Fort Gibson on the Arkansas river, then running down the river to Fort Smith, passing around the base of the San Boies mountain, through a small branch of the Arkansas river, into a branch of Red river by canal, then running down Red river some distance to a branch of Red river, connecting by canal through Gaines' creek with a branch by canal through Sabine river, running three hundred miles into Sabine bay. The fall of this great Sabine and Neosho canal or Sabineosho river will be two thousand feet, making the canal most feasible and practicable.

There will hardly be the hundred and fifty miles of canal; but the great benefit will be in the changing the course of these great rivers in high water so as to save lands in lower Mississippi and Arkansas from overflow, reclaiming of thousands of acres of the best lands of the finest part of our country. The land in Kansas and Indian territory and Texas will increase in value millions of dollars, and support a more dense population than can live in the Mississippi bottoms under the present levee system. The great canal saving all the lands on the Mississippi river, and Arkansas and Red Rivers, doing away with the levees entirely, can be completed at a cost of twenty-five millions of dollars, and it will last for all time.

The great river or canal, running through a country vast in extent, can be completed in three years, at a cost of nine millions of dollars. Creating cutoffs in the river, and straightening the channel of the river can not prevent the filling of the channel. But making new and opening old outcuts, and changing the course of the volume of the water in the Mississippi, Arkansas and Red rivers, and throwing the large volume of water by the Sabine bay, and on the east throwing the waters of the Yazoo river and the Big Black into Pearl river, thence into the Alabama to Mobile bay, thence to the gulf, is the only way to control the Father of Waters, and render a lasting blessing to mankind.

This great river being the outlet of an immense valley, and the great traveling and commercial thoroughfare of this vast country, whatever effects the permanency of its channel or general character as a navigable stream must excite an interest in the minds of the people of the Union, but more especially those that reside in the immediate valley.

NEW COAL DISCOVERIES.

The consular agent of France at Formosa has lately made known the existence of coal at Ponghau, the chief island in the group of the Pescadores, which lie between Formosa and the coast of China. There is a good port in the island of Ponghau called Nabung, with excellent anchorage at all seasons of the year and in all weathers. A commercial publication, the *Annales du Commerce*, says that the only bed of coal yet discovered is at the northern extremity of the island, but that it is probable other beds will be found throughout the whole extent of the subsoil, as well as in the other islands in the same group. No exploration has yet been attempted, nor would it be permitted by the Chinese, so that the supply of coal is limited to such as can be found on the surface, which is necessarily of an inferior quality.

PRIMARY EDUCATION IN ENGLAND.

The statistical Blue-book lately published by the British Board of Trade exhibits in a tabular form the present state of primary education in Great Britain. From this table we learn that the number of schools inspected has increased from 3,825 in 1854 to 8,753 in 1866; the number of children who can be accommodated from 588,000 to 1,724,000, the average number of children in attendance from 461,000 to 1,082,000, and the number of children present at inspection from 473,000 to 1,287,000.

There are also a large number of schools throughout the kingdom which do not receive Government assistance and are not visited by the inspectors. The number of children in such schools is probably less than that in the schools of the other class.

From the same source we learn that the expenditure by the state for public education has increased from £189,000 in 1852 to £813,000 in 1861. In 1863 the grants under the Revised Code commenced, and amounted to £83,000 out of a total expenditure of £721,000. In 1866 the grants under the Revised Code had advanced to £402,000, out of a total expenditure of £649,000.

Since 1852 the population of Great Britain has increased by two and a half millions. The total population is more than twenty-four and a half millions. It will be readily seen that the appliances for educating the young Britons are inadequate, that they have not increased in the ratio of the increase of population, and that Mr. Fawcett and his friends are quite right in agitating for a more efficient school system.

CHICAGO, BURLINGTON AND QUINCY RAILROAD.

The operating accounts of this company for the years ending April 30, 1866 and 1867, compare as given in the following statement:

	1866-66.	1866-67.	Increase.	Decrease
Passenger earnings.....	\$1,787,387 99	\$1,543,714 15	.....	\$243,673 84
Freight ".....	4,304,740 83	4,194,692 99	.....	80,047 83
Miscellaneous.....	213,424 54	414,730 91	201,306 37	.....
Total gross earnings.....	\$6,175,553 85	\$6,083,138 05	.....	\$92,415 80
Operating expenses.....	8,030,164 78	3,093,574 07	\$73,409 29	.....
Net earnings.....	\$2,155,389 07	\$2,989,563 98	.....	\$165,334 55

The following statement exhibits the total income of the company in the years severally and the manner of its disbursement :

	1866-66.	1866-67.	Increase.	Decrease.
Net revenue as above.....	\$3,155,388 57	\$3,989,568 96	833,180 39	\$165,284 55
Interest and exchange.....	80,159 17	63,733 70	16,425 47	.....
Balance from Quincy & Chicago R. R.	81,178 06	.....	.....	81,178 06
Balance of income.....	888,401 08	568,691 55	319,709 53	299,709 53
Total resources.....	\$4,355,117 88	\$3,641,979 21	713,138 67	\$613,138 67

—which amounts were disbursed on the following accounts, viz :

	1865-66.	1866-67.	Increase.	Decrease.
Rent of tracks and depots.....	\$17,467 93	\$14,368 14	3,099 79	\$2,109 79
Transfer office expenses.....	1,588 33	1,000 00	588 33	.....
Interest on bonds.....	421,566 34	406,758 31	14,808 03	.....
Prem. on fractional stock ..	64 88	.....	64 88	.....
Illinois taxes.....	180,619 96	113,385 74	67,234 22	56,234 22
National taxes.....	323,040 18	131,301 04	191,739 14	.....
Improvements.....	6,668 66	.....	6,668 66	.....
Dividend, May.....	418,835 00	509,650 00	90,815 00	.....
" November.....	508,300 00	509,650 00	6,350 00	.....
Stock distribution.....	1,675,300 00	.....	1,675,300 00	.....
Transfer to sinking fund.....	129,000 00	50,000 00	79,000 00	.....
Balance to credit of income.....	588,691 55	1,905,496 00	1,316,804 45	.....

The balance as here given was subject to the April dividend, 1867. In September, 1867, in addition to the usual dividend, amounting to \$547,315 78, leaving accumulated earnings at \$1 358, stock dividend was made in the proportion of one share to every five shares at that date outstanding, being 20 per cent. of the total amount. This distribution made the capital stock about \$12,500,000, at which it now stands.

The financial condition of the company, as exhibited on the balance sheets of April 30, 1866 and 1867, is shown in the following statement :

	April 30, 1866.	April 30, 1867.	Increase.	Decrease.
Capital stock.....	\$10,193,010 00	\$10,899,010 00	\$706,000 00	.....
Bonded debt.....	5,754,416 75	5,458,350 00	296,066 75	296,066 75
Operating accounts.....	304,906 73	866,543 03	561,636 30	.....
Sinking fund.....	778,125 99	538,735 99	239,390 00	.....
Income credit.....	588,691 55	1,905,496 00	1,316,804 45	.....
Total debit.....	\$17,518,440 07	\$18,907,094 01	\$1,388,653 94	\$.....

Against which are charged the following accounts, viz :

	April 30, 1866.	April 30, 1867.	Increase.	Decrease.
Construction (40 miles).....	\$12,777,551 99	\$12,446,710 70	330,841 29	.....
Equipment.....	2,070,309 80	2,056,377 53	13,932 27	.....
Materials and fuel, &c.....	426,805 00	459,804 10	32,999 10	.....
Accounts and bills receivable.....	83,116 35	203,573 96	120,457 61	.....
Burl'n & Mo. River R.R. pref. stock (8 instalments).....	19,976 59	180,022 32	160,045 73	.....
Due from agents and connecting roads...	131,334 18	64,738 74	66,595 44	.....
Account of North'n Cross R.R. bonds not called for.....	370,000 00	370,000 00	.....	.....
Dividends No. 11 and 12 and tax.....	596,479 68	547,315 78	49,163 90	.....
Deposits in New York, Boston and Treasury.....	348,317 71	746,575 13	398,257 42	.....
Deposits with Trustees of Sinking Fund.	321,664 86	223,664 86	98,000 00	.....
Total credit.....	\$17,518,440 07	\$18,907,094 01	\$1,388,653 94	\$.....

These results are certainly very favorable, and were thought to warrant the distribution of stock in September last. In order to show the effect of the results indicated on the price of shares of the company in New York, we append the following statement of the monthly range for the last five years :

	1866-68.	1868-64.	1864-65.	1865-66.	1866-67.
May.....	64½ @ 78	108 @ 130	136 @ 149	103 @ 110	113 @ 117
June.....	75 @ 80	113 @ 116	136½ @ 139	104 @ 108	116 @ 121
July.....	74½ @ 78½	114 @ 114½	136 @ 139	109½ @ 119	124 @ 125
August.....	73 @ 87	115 @ 126½	137 @ 131	111 @ 113	129 @ 130
September..	85½ @ 96½	120 @ 123	117 @ 121	112 @ 125	123 @ 128½
October.....	100 @ 119	122½ @ 131	111 @ 115	124 @ 130	132½ @ 137
November.....	83 @ 116	116½ @ 124½	115 @ 120	110½ @ 115	131 @ 133½
December.....	86 @ 88	115 @ 117½	116½ @ 118	112 @ 111	130 @ 134
January.....	99 @ 111½	118 @ 120	114 @ 120	109½ @ 114	129 @ 133
February.....	105 @ 110	122 @ 133	115 @ 120	112 @ 113	127 @ 130½
March.....	106 @ 110	131½ @ 146	100 @ 115	113½ @ 116	129½ @ 133
April.....	107½ @ 112½	132 @ 140	103 @ 117	115 @ 117½	130 @ 135
Year.....	94½ @ 119	108 @ 149	100 @ 143	102 @ 130	113 @ 138½
Cash dividends, percent ..	9	9	10	10	10
Stock distributions	30	..	10	30	..

The range in May was 130@132; in June, 132@142; in July, 144@150; in August, 148@150; in September, 124@126½, and in October, 126½@137.

THE NATIONAL BANKS OF BOSTON.

The following is a detailed statement of the condition of the National banks of Boston on the first Monday of October, 1867, prepared by Messrs. Wallcy & Bates, bankers of Boston:

Name.	Capital.	Circulat'n.	Individual deposits.	Gov't. p.c.t. div. p.c	Surplus East
Atlantic National.....	\$750,000	\$448,630	\$241,525 74	\$379,100	.27 5
Atlas	1,000,000	798,010	775,861 52	1,122,650	.14 3-5 6
Blackstone	1,000,000	791,915	1,307,306 47	1,010,600	.3 5 6
Boylston	500,000	444,849	591,548 98	615,000	.25 6
Broadway	800,000	174,745	164,915 88	230,000	.11 5
Columbian	1,000,000	797,321	805,081 70	900,000	.12½ 5
Continental	500,000	442,986	664,718 47	542,000	.21 5
Elliot	1,000,000	798,000	786,578 08	906,000	.14 5
Faneuil Hall National.....	1,000,000	543,208	1,168,509 27	772,000	.10 5
First	1,000,000	798,514	826,809 75	1,450 0 0	.59½ 6
Freeman's	400,000	384,261	413,746 38	440,650	.80½ 3
Globe	1,000,000	800,000	1,228,035 50	400,000	.80 6
Hamilton	750,000	242,450	1,052,140 29	653,500	.09½ 6
Howard	750,000	440,656	612,497 64	510,000	.09½ 5
Market	800,000	351,608	853,413 70	459,000	.11 4
Massachusetts'	800,000	353,844	777,850 58	568,000	.22½ 5
Maverick	400,000	244,915	900,105 58	375,000	.21½ 4
Mechanics	350,000	199,587	191,823 43	250,300	.06 5
Merchants	300,000	1,841,500	1,871,875 50	2,850,000	.27½ 5
M't Vernon	200,000	170,785	343,840 00	305 0 0	.25 6
Nat Bank of Com'ce	2,000,000	998,458	1,658,394 11	1,130,000	.19 1-3 5
" of N. A.	1,000,000	598,573	542,746 58	692,500	.05 4½
" of Redem.	1,000,000	800,000	917,062 10	1,508,500	.12½ 4
" of R. pub.	1,000,000	799,400	613,323 37	1,360,000	.8 6
National City	1,000,000	456,493	626,141 58	510,000	.07½ 4
" Eagle	1,000,000	347,057	880,180 90	400,000	.17 4
" Exchange	1,000,000	798,570	892,329 06	521,000	.46½ 6
" Hide & Leth.	1,000,000	794,401	938,908 25	904,150	.24 1-5 7
" Revere	1,000,000	882,790	1,234,313 57	370,000	.32 1-3 6
" Union	1,000,000	546,073	844,394 39	680,000	.27 6
New England Nat'l	1,000,000	799,398	637,099 13	920,000	.21 3-5 5
North	1,000,000	797,953	598,712 60	973,450	.20½ 5
Old Boston	800,000	367,000	1,018,975 39	585,000	.26 2-3 5
Second	1,000,000	792,708	1,532,344 48	1,141,000	.33 6
Shawmut	750,000	594, 65	485,747 45	675,000	.21 1-5 5
Shoe & Leath.	1,000,000	356,511	810,328 04	400,000	.19½ 6
State	2,000,000	982,770	1,112,136 45	1,135,000	.10 1-5 5
Suffolk	1,500,000	754,535	777,408 09	1,050,000	.18 4
The Boston	750,000	524,186	504,535 45	1,077,000	.28½ 5
" Everett	300,000	99,880	142,019 75	118,000	.02½ 10 3½
Third	300,000	174,715	530,330 14	374,300	.21 4
Traders	600,000	178,250	708,723 53	305,000	.08½ 3½
Tremont	2,000,000	716,048	1,031,718 70	1,109,000	.06 1 3 5
Washington	750,000	597,280	672,137 82	785,000	.24 2-3 6
Webster	1,500,000	465,125	829,326 05	534,000	.03 2-3 4

* The Governments include those deposited with the U. S. Treasurer as security for circulating notes and deposits, and those held by the banks themselves.

UNITED STATES MINT FOR OCTOBER.

The following is the official statement of the operations of the United States Mint at Philadelphia for the month of October :

DEPOSITS.					
Value.			Value.		
Gold deposits,	\$554,609	11	Silver deposits and purch.....		\$52,571 25
Total deposits.....					\$587,180 47
COINAGE RECEIVED—GOLD.					
Denomination.	No. of pcs.	Value.	Denomination.	No. of pcs.	Value.
Eagles.....	33,650	772,600 00	Fine bars.....	20	12,059 38
Total.....				33,650	\$784,659 38
SILVER.					
Half Dollars	57,000	28,500 00	Fine bars.....	5	259 67
Total.....				57,005	\$28,759 67
COPPER AND NICKEL.					
One Cent pieces.....	796,000	\$7,900 00	Three Cent p'ces.....	212,000	\$2,260 00
Two Cent pieces.....	267,500	5,350 00	Five Cent pieces..	2,717,000	135,850 00
Total.....				3,985,500	\$158,460 00
RECAPITULATION.					
Gold Coinage... ..	33,650	\$784,650 88	Copper coinage.....	3,987,500	\$158,460 00
Silver do	57,005	27,760 67			
Total.....				4,082,155	\$968,961 66

ASSISTANT TREASURER'S STATEMENT FOR OCTOBER.

The following is an official statement of the business of the office of the Assistant Treasurer of the United States, in New York, for the month of October, 1867 :

RECEIPTS AND DISBURSEMENTS.		
Sept. 31, 1867, by balance.....		\$111,790,853 40
Receipts during the month:		
On account of customs.....	\$9,082,988 27	
do Gold notes.....	5,054,000 00	
do Internal revenue.....	412,589 37	
do Three per cent. Certificates.....	11,560,000 00	
do Post-office Department.....	553,494 16	
do Transfers.....	1,590,500 00	
do Patent fees.....	4,123 30	
do Miscellaneous.....	40,796,092 63	
do Disbursing accounts.....	14,566,840 48	
do Assay office.....	575,434 72	
do Interest accounts.....	507,918 00—	84,697,636 23
Total.....		\$196,457,590 28
Payments during the month:		
Treasury drafts.....	\$71,475,203 83	
Post-office drafts.....	802,240 87	
Disbursing accounts.....	2,795,089 56	
Assay Office.....	212,284 14	
Interest accounts, viz.:		
In coin.....	187,356 75	
In currency.....	106,851 00—	86,586,025 64
Balance.....		\$109,871,564 60
Balance to Cr. Treasurer United States.....	\$95,425,690 98	
Balance to Cr. disbursing accounts.....	10,568,353 64	
Assay Office.....	2,712,245 77	
Balance to Cr. interest accounts.....	1,350,585 30—	109,871,564 60
Receipts for customs in Oct., 1867.....		\$9,082,988 27
do do do 1866.....		11,507,097 75
Decrease do do 1867.....		\$2,424,711 75

OBLIGATIONS OF BANKING INSTITUTIONS AS BAILEES.

At a recent meeting of the Presidents of the several Banks of Baltimore for the purpose of taking into consideration the extent of the obligations incurred by banking institutions for safe keeping of trunks, boxes, and sundry other packages, containing valuables such as are commonly left with such institutions, several legal opinions were presented on the subject, and in addition thereto a letter from H. L. Hulburt, Comptroller of the Currency, in answer to the following question :

"Is the receiving of parcels containing unknown values without charge, as generally practiced by the banks, authorized or permitted by section 8, and if so, are the stockholders responsible for their safety?"

After a brief examination of the question, Mr. Hulburt concludes as follows :

"I have no hesitation in saying that, in my judgment, it is a direct transgression of the provisions of the National Currency Act for a National Bank to assume the custody and safe keeping of miscellaneous valuables. It is dangerous to the bank, and in the nature of a fraud upon the stockholders. If the valuables are lost through the carelessness or dishonesty of a bank officer or clerk, the officers are undoubtedly liable, and if the practice has been sanctioned by the Board of Directors, they will be held liable; and, as they are the agents of the stockholders in managing the affairs of the bank, I do not question but that the stockholders would in the end be required to make good the resulting loss.

I think the custom a very hazardous one, and shall do all in my power to discourage it; and, under certain circumstances, might be compelled to proceed against a bank for a violation of its charter, a course which I hope may be avoided by voluntary action on the part of the banks.

Very respectfully, yours,

H. L. HULBURT, Comptroller.

J. S. NORRIS, Esq., Cashier First National Bank, Baltimore, Md.

PUBLIC DEBT OF THE UNITED STATES.

Abstract statement, as appears from the books and Treasurer's returns in the Treasury Department, on the 1st October and 1st November, 1867 :

DEBT BEARING GOLD INTEREST.

	October 1.	November 1.	Increase.	Decrease.
5 per cent. bonds.....	\$193,431,350 00	\$193,845,950 00	\$414,000 00	\$.....
6 " '67 & '68.....	14,707,941 80	14,690,941 80	.....	17,000 00
6 " 1881.....	233,676,100 00	233,676,900 00	500 00	.....
6 " (6-90's).....	1,235,830,750 00	1,267,893,100 00	32,517,350 00	.....
Navy Pen. F'd 6 p.c.....	13,000,000 00	13,000,000 00	.....	.....
Total.....	1,745,196,141 80	1,773,110,991 80	32,914,850 00	.....

DEBT BEARING CURRENCY INTEREST.

6 per ct. (RR.) bonds.....	\$16,746,000 00	\$18,042,000 00	\$1,296,000 00	\$.....
3-y'ars com. int. n'tes.....	73,839,580 00	63,558,940 00	.....	10,280,640 00
2-years 7-30 notes.....	365,459,100 00	334,607,700 00	.....	30,851,400 00
3 p. cent. certificates.....	.....	11,560,000 00	11,560,000 00	.....
Total.....	461,074,680 00	426,768,640 00	.....	34,306,040 00

MATURED DEBT NOT PRESENTED FOR PAYMENT.

7-30 u. due Aug. 15, '67.....	\$4,250,000 00	\$3,371,100 00	\$.....	\$878,900 00
6 p. c. comp. int. n'tes.....	7,483,100 00	9,316,100 00	1,833,000 00	.....
B'ds of Texas Ind'ty.....	262,000 00	262,000 00	.....	.....
Treasury notes (old).....	164,511 64	163,661 64	.....	850 00
B'ds of Apr. 15, 1842.....	54,061 64	54,061 64	.....	.....
Treas. n's of Ma. 3, '63.....	962,390 00	865,940 00	.....	91,140 00
Temporary loan.....	5,012,303 55	4,168,375 55	.....	843,928 00
Certif. of indebt'ess.....	36,000 00	34,000 00	.....	2,000 00
Total.....	13,331,266 83	13,287,564 83	16,933 00	.....

DEBT BEARING NO INTEREST.

	October 1.	November 1.	Increase.	Decrease
United States notes.....	\$361,164,844 00	\$357,164,844 00	\$.....	\$4,000,000 00
Fractional currency.....	29,884,718 87	30,706,433 29	821,720 00	
Gold cert. of deposit.....	14,897,880 00	14,514,400 00		383,480 00
Total	405,897,877 87	402,385,677 29		3,512,200 58

RECAPITULATION.

	\$	\$	\$	\$
Bearing coin interest.....	1,745,196,141 80	1,773,110,991 80	27,914,850 00	
Bearing cur'y interest.....	461,074,680 00	428,768,640 00		32,306,040 00
Matured debt	18,221,266 88	18,237,538 88	16,272 00	
Bearing no interest.....	405,897,877 87	402,385,677 29		3,512,200 58
Aggregate.....	2,630,389,456 00	2,622,503,848 00		7,885,608 00
Coin & cur. in Treas.....	185,112,009 24	183,998,898 02		1,113,111 22
Debt less coin and cur.....	2,495,277,446 76	2,491,504,450 00		3,772,996 76

The following statement shows the amount of coin and currency separately at the dates in the foregoing table :

COIN AND CURRENCY IN TREASURY.

	October 1.	November 1.	Increase.	Decrease.
Coin	\$103,298,669 69	\$111,540,817 25	\$8,242,147 56	\$.....
Currency.....	31,813,349 56	22,458,030 67		9,355,318 89
Total coin & cur'y.....	135,112,009 24	133,998,898 02		\$1,113,111 22

The annual interest payable on the debts existing October 1, and November 1, 1867, (exclusive of interest on the compound interest notes,) compares as follows :

ANNUAL INTEREST PAYABLE ON PUBLIC DEBT.

	October 1.	November 1.	Increase.	Decrease.
Coin—5 per cents.....	\$9,921,567 50	\$9,942,967 50	\$20,700 00	\$.....
“ “ 67-68.....	882,476 51	881,456 51		1,020 00
“ “ 1881.....	17,030,566 00	17,030,566 00	30 00	
“ “ 5-20s.....	74,192,845 00	76,073,886 00	1,981,041 00	
“ “ N. P. F.....	780,000 00	780,000 00		
Total coin interest	\$102,787,455 01	\$104,668,906 01	\$1,970,751 00	\$.....
Currency—5 per cents.....	1,004,780 00	1,083,520 00	77,780 00	
“ “ 7-30 “.....	26,680,704 30	24,426,363 10		2,254,341 20
Total cur'y interest.....	\$27,685,484 30	\$25,509,883 10	\$.....	\$2,175,601 20
Aggregate coin & currency, excl. comp. interest notes	\$130,412,919 31	\$130,207,089 11	\$.....	\$205,830 20

COMMERCIAL CHRONICLE AND REVIEW.

Course of the Money Market.—Rates of Loans and Discounts.—Volumes of Shares at the Stock Boards.—Bonds sold at the New York Stock Exchange Board.—Course of Consols and American Securities at London.—Prices of Government Securities at New York.—Compound Interest Notes.—Receipts and Shipments of Coin and Bullion at New York.—Course of Gold at New York.—Course of Foreign Exchange at New York.

We seldom hear now, as we did some time ago, the predictions that the present year, like 1857, 1837, and other years ending in the unlucky numeral 7, would be a year of panic and financial disaster in this country. These shocks are becoming better understood, and their causes being brought within the reach of analysis, prevention becomes more possible. Hence the mercantile world no

longer looks upon such terrible events as mysterious visitations with which human foresight cannot cope or human precaution and sagacity combat. Notwithstanding this progress, however, or rather because of it, the course of the money market is closely watched, and the effect of any new forces operating on it is eagerly measured. At this season of the year there is always a special anxiety to know how the loan market will work, for every department of industrial enterprise suffers when money is tight; and from a want of elasticity our financial machinery, under its present management, is very apt to cause some disturbance from the turn in our domestic exchanges which always occurs in the Fall. In diverse ways every merchant and manufacturer, every farmer and mechanic, no less than every banker and capitalists in the country, is directly interested in the question. To the nation at large easy money means material prosperity, and to our enterprising citizens everywhere it means remunerative employment for labor, and steady rewards for well directed enterprise; while stringency in money, on the contrary, means stagnation, distrust and depression, paralysis of commerce and ruin to the producer. It is not without reason that M. Turgot compares the disasters induced by monetary stringency and revulsion to those of an inundation overspreading a fertile Swiss valley. As the flood rises it drowns out one after another of the low-lying rich tracts with their teeming harvests, and as it recedes it gives up these farms impoverished but restored once again to the industry of the laborer. The invasion of monetary stringency sweeps away the accumulated wealth of the past, and as we have a memorable example in England from the revulsion of 1866, it may require a long, painful effort to recuperate. The only point we wish to insist on, however, is this: that what a monetary panic does on the grand scale, a light monetary stringency does on a small scale, for each partake of the same nature, and the difference between the two is chiefly in their extent and their force.

In view of this fact the question how the money market will work ought to be regarded with anxiety not only by the people but by the Treasury. The belief is gaining ground in this country that the vast power which the Secretary of the Treasury holds, and which gives him at critical moments a control over the financial machinery of the country, is sometimes used with the intention of tightening the money market. It is affirmed that that power has been very recently so used, and a fear of the repetition of the experiment is doing something at this very time to depress and partially to paralyze the industry of the country. Waiving this aspect of the case, however, let us look in other directions, and inquire as to the probable indications of the monetary movements of the immediate future. And it cannot be denied that there are forces at work which ought to produce ease. First, we have an abundance of idle capital disengaged—capital of our own, capital belonging to foreigners. As to the American capital, it was ample enough without foreign aid to absorb and manipulate all our Government and other securities three years ago, besides carrying on the business of the country. During those three years our capital has been rapidly growing and accumulating, while the securities have diminished rather than augmented. The Government bonds, the railroad shares, the bonds and negotiable instruments dealt in at the Stock Exchange, have received no great accessions to their aggre-

gate amount during this interval. On the contrary, securities have been brought and exported by foreigners to the extent probably of 200 millions. We have fewer of them now than we had three years ago, and the inference is that if our floating and semi fixed capital was adequate three years ago to manipulate the securities then afloat, much more is it ample and abundant now when it has augmented, and the securities have suffered a large decrease. Then, again, the supplies of our own loanable funds are swelled by large contributions from foreigners. Money in Lombard street begs in vain for borrowers to take it at 1 or 2 per cent., while in Wall street it gets ready employment at 6 or 7 per cent. The admonitory war cloud warns it off from Europe, and stimulates its flight across the Atlantic to our safer Continent. If this foreign capital were not here, or if it should not increase, as it probably will, we have adequate supplies of our own. Having the foreign surplus balances at command, however, we shall use them, and one of the effects will of necessity be, that other things remaining equal, the money market will work the easier, and give the more stimulus to the great financial work of the country, which work will be for several years to come the reorganizing of our dislocated industry, North and South, and the adjustment or removal of every tax which paralyzes and disorganizes that industry, leaving other problems and difficulties which are too far to reach, and too difficult to deal with at present. So far, then, as ample supplies of capital are a condition of an easy money market, there seems to be no cloud of doubt hanging over the immediate future. How far the Treasury may disturb the movements of capital, by locking up currency in the Treasury or by contracting the volume of greenbacks, we cannot tell, but with the experience of the past to guide him, Mr. McCulloch will, no doubt, adopt in this respect a very cautious and conservative course.

Last month we had to chronicle an extreme stringency in the money market, connected with the unusually large demand for money for moving the grain crops. During October there has been an abatement of the pressure, and the month closes with an abundance of money on call at 5@6 per cent. The crisis, however, has left behind certain unfavorable results. The almost total suspension of discounting operations produced embarrassments among the merchants, which in turn increased the caution of discounters, and, for a time, rendered it almost impossible to negotiate even the best class of mercantile paper, no such stringency having been experienced since 1857. As a natural result, there have been several failures among merchants here and in other cities, and chiefly houses of respectable standing. Toward the close of the month the banks were disposed to make their enlarged balances more available for discounting their customers' notes, but among outside buyers there was unusual caution, and none but the best known names could be negotiated at the legal rate of interest.

In general trade there has been a somewhat severe depression, resulting in a decline in the prices of many kinds of manufactured goods. The stringency in money has had a certain influence in checking business, but the more prominent causes of the stagnation appear to have been the continued high price of breadstuffs, the prevalence of sickness in the South, causing a decided check upon trade with that section; an over-supply of goods, attended with a lack of confidence

dence among buyers; and a reaction arising from the disappointment of over sanguine expectations. The produce markets, however, have shown a prosperous activity. Notwithstanding the high prices of breadstuffs, all the avenues of transportation to the seaboard have been crowded with grain, and liberal shipments have been made to Great Britain. Although the high prices of flour have a tendency to limit the consumption of other products, yet it is reasonable to expect that the handsome profits realized by the farmers upon their large crops will induce an active business with the agricultural population later in the season. The month opened with weakness in the cotton market, attended with the failure of cotton firms at Liverpool and New York; but, subsequently, an improvement in the trade of Manchester, and the low stock of the American staple at Liverpool caused an advance, which has had the effect of infusing a healthier feeling into this important branch of trade. As yet there has been no important demand for money for moving the cotton crop; and some doubt is entertained whether, in the present condition of the money market, it will be found easy to secure the usual facilities for the purchase of this staple. In fact the general opinion appears to be that if Europe wants our cotton this year she must send the money and ships to move it.

The following are the rates of loans and discounts for the month of October :

RATES OF LOANS AND DISCOUNTS.

	Oct. 4.	Oct. 11.	Oct. 18.	Oct. 25.
Call loans.....	7 @—	7 @—	7 @—	7 @—
Loans on Bonds and Mortgage.....	6 @ 7	6 @ 7	—@ 7	—@ 7
A 1, endorsed bills, 2 mos.....	7 @ 7½	7 @ 7½	8 @ 9	8 @ 9
Good endorsed bills, 3 & 4 mos.....	8½@10	8½@10	9 @12	9 @12
" " single names.....	10 @—	10 @—	11 @12	11 @12
Lower grades.....	12 @20	12 @30	16 @2½	16 @2½

The course of business at the Stock Exchange has been unsettled and irregular. Last month large amounts of stock were bought up by combinations, upon the supposition that the increased earnings of the roads would cause a demand for stocks from the public. The stringency in money and the general depression in business, however, has caused the public to be sellers rather than buyers. Under this disappointment, the cliques have had to resort to factitious expedients for forcing up the market; but they appear to have found little co-operation from any class of operators. With the exception of a few clique specialities, prices are now lower than at the beginning of the month.

The following table shows the volume of shares sold at the New York Stock Exchange Board and the Open Board of Brokers in the three first quarters and in the month of October, and the total since January 1 :

VOLUME OF SHARES SOLD AT THE STOCK BOARDS.

Classes.	1st Quarter.	2d Q'rter.	3d Q'rter.	October.	Since Jan. 1.
Bank shares.....	7,815	11,158	9,070	1,886	29,924
Railroad ".....	5,079,773	4,910,358	4,365,798	1,536,573	15,792,501
Coal ".....	67,800	25,405	40,568	4,030	137,803
Mining ".....	128,857	91,188	92,594	19,900	337,439
Improv't ".....	81,369	103,435	68,649	13,900	266,353
Telegraph ".....	117,973	153,118	264,498	239,784	645,318
Steamship ".....	223,683	215,873	132,450	47,337	624,343
Expr's&c".....	17,674	104,480	117,379	47,783	287,316
At N. Y. Stock Ex. B'd.....	2,072,406	2,074,261	2,013,966	769,963	6,930,696
At Open Board.....	2,652,443	2,540,659	2,996,930	1,030,439	11,220,491
Total 1867.....	5,724,849	5,615,010	5,010,896	1,800,399	18,151,147
Total 1866.....	6,172,087	5,842,110	4,833,801	2,911,235	19,258,233

Government securities have sympathized with the condition of the money market and the unsettled state of confidence in Europe. The discovery of an important counterfeit on the Seven-thirty notes also had the effect of temporarily depressing the market. At the close of the month the markets of London and Frankfort show higher quotations for Five-twenties than at the commencement, and in the market here there is a steady tendency toward a recovery in prices.

The amount of Government bonds and notes, State and city bonds, and company bonds, sold at the New York Stock Exchange Board in the three first quarters and in October, and the total since January 1, is shown in the statement which follows:

BONDS SOLD AT THE N. Y. STOCK EXCHANGE BOARD.

Classes.	1st quarter.	2d quarter.	3d Quarter.	October.	Since Jan. 1.
U. S. bonds.....	\$18,708,650	\$40,888,850	\$43,384,050	\$11,649,500	\$120,044,550
U. S. notes.....	4,792,480	8,317,600	10,321,550	2,041,900	21,503,530
St's & city b'ds.....	8,854,100	7,601,650	7,954,800	3,831,500	28,241,550
Company b'ds.....	2,218,900	2,367,700	2,184,000	892,300	7,662,900
Total 1887.....	\$34,565,430	\$58,705,800	\$63,743,900	\$26,465,100	\$177,300,730
Total 1886.....	32,600,500	36,414,350	44,050,100	17,012,550	120,077,500

The closing prices of Consols and certain American securities (viz. U. S. 6's, 5-20's 1862, Illinois Central and Erie Railway shares, and Atlantic and Great Western consolidated bonds) at London, on each day of the month of October, are shown in the following statement:

COURSE OF CONSOLS AND AMERICAN SECURITIES AT LONDON—OCTOBER, 1887.

Date.	Cons. for mon.	American securities U. S. 6's, 5-20's Ill. C. sh's. Erie A. & G. W.	Date.	Cons. for mon.	American securities U. S. 6's, 5-20's Ill. C. sh's. Erie A. & G. W.
Tues.....1	91½	72½ 77 42 23½	Monday.....21	91½	69 74 45 23½
Wedne.....2	91½	71½ 76½ 41½ 23½	Tues.....22	91½	69½ 74½ 45½ 23½
Thurs.....3	91½	71½ 76½ 41½ 23½	Wedne.....23	91½	69½ 74½ 45½ 23½
Friday.....4	91½	71½ 76½ 40½ 23½	Thurs.....24	91½	69½ 74½ 45½ 23½
Sat'day.....5	91½	71½ 77½ 40½ 22½	Friday.....25	91½	69½ 74½ 45½ 23½
Sunday.....6			Sat'day.....26	91½	69½ 74½ 45½ 23½
Monday.....7	91½	71½ 77½ 41½ 22½	Sunday.....27		
Tues.....8	91½	71½ 77½ 41½ 22½	Monday.....28	91½	69½ 74½ 45½ 23½
Wedne.....9	91½	71½ 77½ 41½ 22½	Tues.....29	91½	69½ 74½ 45½ 23½
Thurs.....10	91½	72 77½ 44 21½	Wedn.....30	91½	69½ 74½ 45½ 23½
Friday.....11	91½	71½ 78 43½ 21½	Thurs.....31	91½	70½ 80½ 47½ 23½
Sat'day.....12	91½	71½ 77½ 44 21½			
Sunday.....13			Highest.....	91½	73½ 80½ 47½ 23½
Monday.....14	91½	71½ 77½ 46½ 21½	Lowest.....	90½	68½ 76½ 46½ 21½
Tues.....15	91½	71½ 77½ 46½ 21½	Range.....	1½	4½
Wedne.....16	91½	71½ 77½ 45½ 21½			
Thurs.....17	91½	68½ 77½ 44½ 21½	Low Since Jan. 1	90	67½ 73½ 43½ 21½
Friday.....18	91½	68½ 77½ 45½ 21½	Highest Since Jan. 1	96	75½ 82½ 47½ 23½
Sat'day.....19	91½	68½ 77½ 45½ 21½	Range	6	7½ 10 11½ 23½
Sunday.....20					

The lowest and highest quotations for U. S. 6's (5-20 years) of 1862 at Frankfort in the weeks ending Thursday, have been as follows:

	Oct. 3.	Oct. 10.	Oct. 17.	Oct. 24.
Frankfort.....	74½@75½	74½@74½	73½@74½	74½@75½

The daily closing prices of the principal government securities at the New York Stock Exchange Board, as represented by the latest sale officially reported, are shown in the following statement:

PRICES OF GOVERNMENT SECURITIES AT NEW YORK, SEPTEMBER, 1867.

Day of month.	6's, 1861.	Coup.	Reg.	1862.	6's, (5-30 yrs.)	Coupon	new.	1867 yrs.	5's, 10-40 yrs.	7-36. 2d sr.
Tuesday 1	110%	110%	113	108%	109%	107%	107%	99%	106%	106%
Wednesday 2	110%	110%	113	108%	109%	107%	107%	99%	106%	106%
Thursday 3	110%	110%	113	108%	109%	107%	107%	99%	106%	106%
Friday 4	110%	110%	113	108%	109%	107%	107%	99%	106%	106%
Saturday 5	110%	110%	113	108%	109%	107%	107%	99%	106%	106%
Sunday 6	110%	110%	113	108%	109%	107%	107%	99%	106%	106%
Monday 7	111%	111%	113	109%	109%	107%	107%	100%	106%	106%
Tuesday 8	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Wednesday 9	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Thursday 10	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Friday 11	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Saturday 12	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Sunday 13	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Monday 14	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Tuesday 15	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Wednesday 16	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Thursday 17	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Friday 18	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Saturday 19	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Sunday 20	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Monday 21	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Tuesday 22	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Wednesday 23	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Thursday 24	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Friday 25	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Saturday 26	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Sunday 27	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Monday 28	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Tuesday 29	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Wednesday 30	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
Thursday 31	111%	111%	113	109%	109%	107%	107%	101%	106%	106%
First	110%	110%	113	109	109%	107%	107%	99%	106%	106%
Lowest	110%	110%	113	108%	107%	106%	106%	99%	104	104
Highest	113%	113%	113	109%	110%	107%	107%	101%	106%	106%
Range	3	3	1%	1%	1%	1%	1%	1%	2%	2%
Last	113	113%	113%	109%	110%	107%	107%	100%	106%	106%

The quotations for Three-years' Compound Interest Notes on each Thursday of the month have been as shown in the following statement :

PRICES OF COMPOUND INTEREST NOTES AT NEW YORK, SEPTEMBER, 1867.

Issue of	October 2.	Oct. 10.	Oct. 17.	Oct. 24.	Oct. 31.
October, 1864	119% @	119% @	119% @	119% @	119% @
December, '64	118% @ 118%	118% @ 118%	118% @ 119	118% @ 119	118% @ 119
May, 1865	117 @ 117%	117% @ 117%	117% @ 117%	117% @ 117%	117% @ 117%
August, 1865	116% @ 116%	116% @ 116%	116% @ 116%	116% @ 116%	116% @ 116%
September, '65	115% @ 115%	115% @ 116	115% @ 116	115% @ 116	115% @ 116%
October, 1865	116% @ 116%	115% @ 116%	115% @ 115%	115% @ 115%	115% @ 115%

The first series of figures represents the buying and the last the selling prices at first class brokers' offices.

The following are the closing quotations at the regular board on each Friday of the last six weeks.

	Sept. 27.	Oct. 4.	Oct. 11.	Oct. 18.	Oct. 25.	Nov. 1
Cumberland Coal	29	27	30	....	....	24%
Quicksilver	25%	25	25	21	16%	18%
Canton Co.	48%	48%	....	....	48%	48%
Mariposa pref.	19	17	17	17	14	....
New York Central	107%	110%	114%	113	112	112%
Erie	61%	70	74%	71%	72%	79
Hudson River	127%	128%	128%	....	....	125%
Reading	101%	101%	101%	100%	96%	97
Michigan Southern	81%	81%	81%	80%	77%	78%
Michigan Central	109	109	109	84	81%	....
Cleveland and Pittsburg	79	79%	83%	....	....	....
Cleveland and Toledo	128%	128	121% x. d.	106	108	104%
Northwestern	41	48%	48%	46%	47%	47%
" preferred	65%	67%	67%	67	65	65%
Rock Island	109%	108%	x. d. 97	97%	95	96
Fort Wayne	109%	100%	100%	99%	95	96%
Illinois Central	....	121%	123%	121%	....	120%

The receipts and shipments of coin and bullion at New York in the three first quarters, and in the month of October, with the total since January 1, have been as shown in the following statement:

RECEIPTS AND SHIPMENTS OF COIN AND BULLION AT NEW YORK.

	First quarter.	Second quarter.	Third quarter.	Month of October.	Since Jan. 1.
Rec'ts f'm California.....	\$6,109,861	\$6,899,565	\$9,240,079	\$2,330,234	\$24,559,739
Imp'ts f'm for'n ports.....	409,077	1,147,619	942,519	219,666	2,718,281
Total receipts.....	\$6,518,938	\$8,047,174	\$10,182,598	\$2,559,900	\$27,308,399
Exp'ts to foreign ports.....	6,568,938	18,023,709	17,486,446	1,205,529	43,284,622
Excess of exports.....	\$49,020	\$9,981,535	\$7,293,848	\$.....	\$15,320,398
Excess of receipts.....				1,259,421	

The following statement shows the receipts and exports in October and since January 1, for seven years:

	—California Receipts—		—Foreign Imports—		—Foreign Exports—	
	Oct.	Since Jan. 1.	Oct.	Since Jan. 1.	Oct.	Since Jan. 1.
1867.....	\$2,339,234	\$24,559,739	\$219,666	\$2,718,281	\$1,205,529	\$43,284,622
1868.....	4,902,247	35,433,314	1,434,163	8,092,723	1,463,450	55,468,749
1869.....	2,481,083	16,232,389	77,943	1,638,401	2,516,326	26,186,863
1870.....	855,378	9,719,903	139,775	1,868,919	3,517,171	37,452,993
1871.....	1,032,899	10,637,211	76,053	1,806,174	6,310,156	39,066,264
1872.....	2,387,298	21,042,949	266,676	1,201,268	6,707,619	43,641,253
1873.....	2,980,615	31,217,218	659,838	35,636,063	15,038	2,224,338

The following formula furnishes the details of the general movement of coin and bullion at the port for the past three-quarters and the month of October:

GENERAL MOVEMENT OF COIN AND BULLION AT NEW YORK.

	1st quarter.	2d quarter.	3d quarter.	Oct.	Since Jan. 1.
In banks at commen't.....	\$13,185,222	\$8,522,609	\$7,783,996	\$9,496,163	\$13,185,222
Rec's from California.....	6,109,861	6,899,565	9,240,079	2,330,234	24,559,739
Imp's f'm for'n ports.....	409,077	1,147,619	942,519	219,666	2,718,281
Coin in't st p'd by U.S.....	10,823,303	17,793,025	19,644,397	189,257	43,463,031
Total repo'd sup'y.....	\$30,543,463	\$34,962,808	\$37,596,591	\$12,942,470	\$96,056,564
Exp. 'o for'n ports.....	\$6,568,938	\$18,023,709	\$17,486,446	\$1,205,529	\$43,284,622
Customs duties.....	\$3,170,628	\$7,186,886	\$4,665,963	\$9,063,966	\$24,108,403
Total withdrawn.....	\$39,739,566	\$45,214,595	\$52,152,414	\$10,269,515	\$147,342,110
Excess of rep'd sup'y.....	\$.....	\$.....	\$.....	\$1,953,955	\$.....
Excess of withdrawls.....	9,195,123	10,651,787	14,595,823	.....	34,442,733
In banks at close.....	8,523,609	7,783,996	9,496,163	6,161,164	6,161,164
Deficit in reported supply, made up from unreported sources.....	\$17,717,783	\$18,630,783	\$34,001,986	\$4,207,209	\$64,547,770

The unsettled and, at one time, threatening condition of affairs in Italy has produced among the foreign bankers a disposition to hold gold; which has been confirmed by the high rates obtainable upon loans of coin, the scarcity of gold for delivery having enabled holders to employ their stock at from 1-32 to $\frac{1}{2}$ per cent. per day. There has been, however, a strong counteraction in the anticipation of the payment of \$25,000,000 of United States coupons on the 1st of November. The less threatening aspect of the Italian outbreak within the last few days facilitated the downward movement of the premium, and at the close the quotation is $140\frac{1}{2}$, against $145\frac{1}{2}$ at the commencement. The Treasury has sold but little coin during the month. The exports have been light, falling short \$1,353,421 of the receipts.

The statement which follows shows the daily fluctuations in the price of American gold coin at the Exchange Gold Room during the month of October :

COURSE OF GOLD AT NEW YORK—OCTOBER, 1867.

Date.	Open'g	Lowest	Highest	Closing	Date.	Open'g	Lowest	Highest	Closing
Tuesday.....	1 143½	143½	143½	143½	Monday.....	31 144	143½	144	144
Wednesday....	2 143½	143½	144½	144	Tuesday.....	23 143½	143½	143½	143½
Thursday.....	3 144½	144½	145½	144½	Wednesday....	23 143½	143½	143½	143½
Friday.....	4 145	144½	145½	145½	Thursday.....	24 143½	143½	143½	143½
Saturday.....	5 144½	144½	144½	144½	Friday.....	25 143½	143½	141½	141½
Sunday.....	6				Saturday.....	26 141½	141½	143	141½
Monday.....	7 145	144½	145½	145½	Sunday.....	27			
Tuesday.....	8 145	144½	145½	145	Monday.....	28 143½	143	143½	143½
Wednesday....	9 144½	143	144½	143½	Tuesday.....	29 143	141½	143½	143
Thursday.....	10 143½	143½	144	143½	Wednesday....	30 141½	140½	141½	140½
Friday.....	11 137½	143½	143½	143½	Thursday.....	31 140½	140½	140½	140½
Saturday.....	12 144½	144½	144½	144½					
Sunday.....	13								
Monday.....	14 144½	143½	144½	144½	Oct. 1867.....	143½	140½	145½	140½
Tuesday.....	15 144½	143½	144½	143½	" 1868.....	143	145½	154½	146½
Wednesday....	16 144½	143	144½	143½	" 1868.....	144	144	149	146½
Thursday.....	17 144½	143	143½	143½	" 1864.....	129	128	227½	223½
Friday.....	18 143	143	144½	144½	" 1863.....	149	140	156½	145½
Saturday.....	19 143½	143½	144½	144½	" 1863.....	121½	122	183½	182½
Sunday.....	20								
					8'ce Jan. 1, 1867.....	182½	183½	146½	140½

Foreign exchange has ruled dull throughout the month. The importers have remitted comparatively little, and with a fair supply of produce bills rates have been weak. Toward the close the demand for bills for remittances against receipts of coupons from foreign bondholders caused a firmer market. Cotton bills have been at a heavy discount owing to the want of confidence in Liverpool cotton houses.

The following table shows the course of Foreign Exchange, daily, for the month of October :

COURSE OF FOREIGN EXCHANGE (60 DAYS) AT NEW YORK—OCTOBER.

Days.	London. cents for 64 pence.	Paris. centimes for dollar.	Amsterdam. cents for florin.	Bremen. cents for rix daler.	Hamburg. cents for M. banco.	Berlin. cents for thaler.
1.....	109½ @ 109½	517½ @ 515	41 @ 41½	78½ @ 79	36 @ 36½	71½ @ 73
2.....	109½ @ 109½	517½ @ 515	41 @ 41½	78½ @ 79	36 @ 36½	71½ @ 73
3.....	109 @ 109½	517½ @ 515	40½ @ 41	78½ @ 79	35½ @ 36	71½ @ 71½
4.....	109 @ 109½	517½ @ 515	40½ @ 41	78½ @ 78½	35½ @ 36	71½ @ 71½
5.....	109 @ 110	517½ @ 515	40½ @ 41	78½ @ 78½	35½ @ 36	71½ @ 73
6.....						
7.....	109½ @ 109½	517½ @ 516½	40½ @ 41	78½ @ 78½	35½ @ 36½	71½ @ 71½
8.....	109½ @ 109½	517½ @ 516½	40½ @ 41	78½ @ 78½	35½ @ 36½	71½ @ 71½
9.....	109½ @ 109½	517½ @ 516½	40½ @ 41	78½ @ 78½	36 @ 36½	71½ @ 71½
10.....	109½ @ 110½	517½ @ 516½	40½ @ 41	78½ @ 78½	36 @ 36½	71½ @ 73
11.....	109½ @ 109½	518½ @ 517½	40½ @ 41	78½ @ 78½	35½ @ 36½	71½ @ 71½
12.....	109½ @ 109½	516½ @ 515	40½ @ 41	78½ @ 78½	35½ @ 36½	71½ @ 71½
13.....						
14.....	109½ @ 109½	518½ @ 517½	40½ @ 41	78½ @ 78½	35½ @ 36	71½ @ 73
15.....	109½ @ 109½	518½ @ 517½	40½ @ 41	78½ @ 78½	35½ @ 36	71½ @ 73
16.....	109½ @ 109½	518½ @ 517½	40½ @ 41	78½ @ 78½	35½ @ 36	71½ @ 73
17.....	108½ @ 109	521½ @ 518½	40½ @ 41	78½ @ 78½	35½ @ 36	71½ @ 73
18.....	108½ @ 109½	520 @ 518½	40½ @ 41	78½ @ 78½	35½ @ 36	71½ @ 73
19.....	108½ @ 109½	520 @ 518½	40½ @ 41	78½ @ 78½	35½ @ 36	71½ @ 73
20.....						
21.....	108½ @ 109½	520 @ 518½	40½ @ 41	78½ @ 78½	35½ @ 36	71½ @ 73
22.....	108½ @ 109	520 @ 518½	40½ @ 41	78½ @ 78½	35½ @ 36	71½ @ 73
23.....	108½ @ 109	520 @ 518½	40½ @ 41	78½ @ 78½	35½ @ 36	71½ @ 73
24.....	108½ @ 108½	520 @ 518½	40½ @ 41	78½ @ 78½	35½ @ 35½	71½ @ 71½
25.....	108½ @ 108½	520 @ 518½	40½ @ 41	78½ @ 78½	35½ @ 35½	71½ @ 71½
26.....	108½ @ 108½	520 @ 518½	40½ @ 41	78½ @ 78½	35½ @ 35½	71½ @ 71½
27.....						
28.....	109 @ 109½	518½ @ 517½	40½ @ 41	78½ @ 78½	35½ @ 36	71½ @ 73
29.....	109½ @ 109½	518½ @ 517½	40½ @ 41	78½ @ 78½	35½ @ 36	71½ @ 73
30.....	109½ @ 109½	518½ @ 517½	40½ @ 41	78½ @ 78½	35½ @ 36	71½ @ 73
31.....	109½ @ 109½	516½ @ 515	40½ @ 41	78½ @ 78½	36 @ 36	71½ @ 73

	London.	Paris.	Amsterdam.	Bremen.	Hamburg.	Berlin.
Oct.	108½ @ 109½	521½ @ 515	40½ @ 41½	78½ @ 79	85½ @ 86½	71½ @ 72½
Sep.	109 @ 110	521½ @ 515	40½ @ 41½	78½ @ 79	85½ @ 86½	71½ @ 72½
Aug.	109½ @ 110½	518½ @ 512½	40½ @ 41½	78 @ 79	85½ @ 86½	71½ @ 72½
July	109½ @ 110½	517½ @ 511½	40½ @ 41½	78 @ 79	86 @ 86½	71½ @ 72½
Jun.	109½ @ 110½	518½ @ 511½	40½ @ 41½	78½ @ 79	86 @ 86½	72 @ 72½
May	109½ @ 110½	520 @ 510	40½ @ 41½	78½ @ 79	86 @ 86½	71½ @ 72½
Apr.	108½ @ 110	522½ @ 512½	40½ @ 41½	78½ @ 79	85½ @ 86½	71½ @ 72½
Mar.	108 @ 109	525 @ 515	40½ @ 41½	78 @ 79	85½ @ 86½	71½ @ 72½
Feb.	108½ @ 109	522½ @ 515	40½ @ 41½	78½ @ 79	86 @ 86½	71½ @ 72½
Jan.	108½ @ 109	520 @ 513½	41½ @ 41½	78½ @ 79	86½ @ 86½	72 @ 72½
Since Jan. 1.	108 @ 110½	525 @ 510	40½ @ 41½	78 @ 80	85½ @ 86½	71½ @ 72½

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

Letter of Mr. Jay Cooke to National Bank Officers.—Returns of the New York, Philadelphia and Boston Banks.

The elaborate letter addressed by Mr. Jay Cooke to certain National Bank officers in Ohio has been widely published by the newspapers, and has brought into a clearer light the fact that throughout the country a very uneasy feeling prevails as to what Congress will do next in regard to the monetary situation generally, and to that of the National Banks in particular. The momentous importance of the crisis through which the finances of the nation are passing weigh heavily on the public mind, and never probably have monetary problems of such magnitude and difficulty offered themselves to any deliberative assembly in the world, as those to be forced on the attention of the Congress which will meet at Washington on the 21st of November.

We do not profess to be cognizant of the purposes of the leaders of parties, but there are a few points as to practical legislation which may, we think, be pretty confidently relied on. And of these one is, that Congress in its financial arrangements will act in a very conservative spirit, and will do nothing to destroy or impair the National Banking system. From the general tone of Mr. Cooke's letter, it would seem that he is apprehensive of some such mischance. There are, no doubt, a few persons to be found who would use their influence with Congress to this end. Possibly the rigid demands of the National Bank law as now administered, the care it takes to discover and cut off every unsound part of the system, and to enforce the solvency, strength and good repute of the individual banks, may have made some dissatisfied persons long for the license and ill-regulated freedom of the old exploded State-banking system. We grant also that other enemies of the National Banks may oppose the new and more efficient system from purer motives, but the prevailing impression among the people everywhere is that the banks are entitled to have a fair trial, and that sufficient time has not elapsed, nor sufficient hostile evidence accumulated to enable an impartial jury to give a verdict against them.

We observe, however, that Mr. Cooke falls into the error which prevails in some quarters, of supposing that the banks are the recipients of a charter from the nation, which in some way secures the privileges they enjoy, and prohibits curtailment for an indefinite time in the future. To set this question at rest, it is only necessary to refer to the closing section of the National Currency Act,

which specially provides that any provision in that law may be changed or cancelled at the pleasure of Congress. But this National Currency law is the charter of the banks, and so far as that instrument is concerned, it is clear that the claim set up in behalf of these institutions by some of their friends falls to the ground.

It is well known to our readers that we have steadily advocated the solid interests of the National Banks. In common with a large part of the nation we did not approve of the system before it was adopted, but our argument is, that now the banks are established, we are bound to guard and to improve them as a vital part of the financial machinery of the country. They are indispensable aids to business, and having turned out to be a much more stable and efficient organization than many even of their friends ventured to anticipate, we shall give them a hearty, zealous support as long as they seem to us to deserve it. In giving this support we will not knowingly adopt invalid arguments; and this we think is the character of such as are founded on the claim that Congress has conferred a franchise in this case, which it cannot revoke at any moment when the recall is clearly for the good of the country. But we go one step beyond this, and we unhesitatingly claim for the National Banks that, in the existing state of our finances, our commerce and our trade, the highest interests of the country require that these institutions shall be sustained, and their efficiency as far as possible augmented. We support the cause of the banks, then, not because as private institutions they have received a valuable franchise which confers vested rights that cannot be meddled with, but because they have important public functions entrusted to them by the nation, and because, on the whole, they execute their functions so as to justify confidence and to merit protection. In this opinion we are at one, we believe, with Congress. During the last session an attempt was made to revoke the privileges in question, and several bills introduced for that purpose failed and were rejected. It will be remembered that the complaints then brought against the banks were various, and were founded partly on the fact that these institutions have the privilege of issuing notes for which the credit of the Treasury is pledged, and which the Government therefore might just as well derive the pecuniary benefit of, so as to relieve the country from the pressure of taxation. To this the obvious reply was that this is not a new complaint. It had been discussed and overruled before the system was established. In his letter, Mr. Cooke argues very justly that the benefits which the National system has conferred on the country are well worth all they have cost by the grants made and the privilege conceded. Among these benefits he reckons the unification of the bank currency in every State of the Union, and the destruction of the issuing powers of a multitude of irresponsible ill-regulated banks all over the country whose unsafe currency, had it not been destroyed, would have brought on us during the past three years panics and financial disaster, exemption from which is chiefly purchased by the franchises conferred. He also claims that this exemption, without the establishment of new banks, would have been impossible.

Another argument against the banks is, that if allowed to issue currency at all, they should not be permitted to draw from the National Treasury eighteen millions of coin a year as interest on three hundred millions of bonds deposited

as security for circulation. To this Mr. Cooke replies by attempting to show that these eighteen millions and more are paid back again to the Government in various ways, and chiefly by taxation of several kinds. This is decidedly the weakest part of Mr. Cooke's ingenious paper, and his statements will be sharply criticized. If, as we suppose, it is intended that the letter should be republished in pamphlet form for the information of members of Congress and of the people generally, we would urge that this part of it undergo careful revision. The argument as to the superiority of bank notes for greenbacks should also be pruned away as irrelevant and unsound. A bank note can never be worth more than what it is redeemed in, and the bonds deposited at Washington are placed there not as security to the public, who take the notes, but to the Government, which endorses them.

It is supposed by many persons that the special claims of the National banks to superiority over the State organizations which it superseded, rest almost exclusively on the security of the bank notes, which is the most perfect ever devised, consisting as it does of a deposit of Federal bonds, a guarantee from the Government founded on that deposit, and a reserve of legal tender money to the amount of fifteen or twenty-five per cent. on the liabilities of every bank in the country. We should do injustice to the National system, and overlook some of its chief merits, if we were to ignore the fact that the safety of the circulating notes is only one of its advantages, and by no means the most perfect, although it may be the most prominent. The bank note, it is true, is secure of ultimate payment, because the Government endorses it, and if the bank fails the Treasury is liable for the amount, and is empowered to sell the pledged bonds to obtain funds to meet the endorsement and make the dishonored payment. But security for ultimate payment is not the only safeguard needed by notes which are to pass as current money. There must also be redemption in specie or other lawful money. And this redemption must be provided in the metropolitan centres as well as at the counter of the issuing bank. How defective our system is in this respect none have shown more clearly than Mr. Hulbard, the Comptroller of the Currency, who will no doubt propose again some adequate remedy in his forthcoming report for Congress, as he did in his very able report of last year.

The National banking system has, however, as we said, other distinctive features to commend it, unconnected with the security of its notes. And one of these is the light of publicity which it sheds on the business which the banks are doing. It may be taken as a fundamental maxim of banking that bad business requires covering up, and can only thrive by secrecy. Now, the banks of this country are so closely united and bound together, that each is as it were a guardian of the solvency of others, and all the sisterhood partake of the general security to which each contributes. Every member of the organized whole is interested in keeping every other member strong, and in cutting off and removing the unsound and rotten parts of the system. Moreover, the frequent visits of competent inspectors, and the monthly and quarterly reports which are sent to Washington and published in the newspapers; the discipline which the department is empowered to inflict on institutions which are guilty of shortcomings and financial misdemeanors, and the severe penalties which are denounced against

officers who are convicted of corruption, speculation or fraud; these and other provisions with which our readers are familiar, are exercising a powerful influence to strengthen the banking system, and to keep it strong.

A careful scrutiny of the quarterly returns, which we publish in another part of this number of the magazine, will show to what a gratifying extent these appliances have succeeded in furthering the ends for which they were devised. There is, no doubt, much remaining to be done. Some of the old State banks which were in an unsound condition for years before they were changed into National Banks, have not yet succeeded in shaking off their incubus which has long weighed them down. They are still suffering the effects of old sins, and are laboring to conquer them with less success than might be desired. Of the 1,200 State institutions which have been converted, some are in this struggling condition; and of the 400 new banks, a few may have been drifted by ignorant or by speculative officers into troubled waters. We do not deny or conceal these facts. But what we claim is that the number of these defaulters is relatively small—that that number is diminishing—that it is smaller now than six months ago—and that, with very inconsiderable exceptions, our 1,600 National Banks are at this hour in a sounder, safer position than ever they have been since this great experiment of National banking was fairly established in the United States.

Perhaps the most satisfactory showing in the reports before us is in the reserves which are kept up with sedulous care, and which no bank which values its credit will allow to run down, except as a temporary accident. In reserves of the banks we observe that the Compound Notes amount only to fifty-six millions, while the greenbacks are one hundred millions. Further changes will be made in the reserves during the current quarter by the fifty millions of Three per Cent. Certificates, which appear for the first time in the November debt statement, the amount of \$11,560,000 having been issued last month. These securities are designed to counteract any tendency to spasmodic contraction of bank credits and of general business which might arise from the withdrawal of the Compound Notes, of which fourteen and a half millions were cancelled in October. These certificates, like the compounds, can be held as lawful reserve, and were authorized for that purpose by the act of 2d March, 1867. As it may be useful to our banking readers to have on record for easy reference the rules which regulate the availability of these certificates in print, the following official letter covers nearly all the subjects on which information is likely to be required:

TREASURY DEPARTMENT, OFFICE OF COMPTROLLER }
OF THE CURRENCY, WASHINGTON, Oct. 18, 1867. }

DEAR SIR—Your letter of the 17th inst. is received, inquiring what portion of the three per cent. certificates is available as a reserve for the National Banks. The act of March 2, 1867, authorizing the issue of three per cent. certificates and their use as a part of the reserve of National banks, also provides that not less than two-fifths of the entire reserve of such bank shall consist of lawful money of the United States. The country banks are required to have a reserve of fifteen per cent. of circulation and deposits, two-fifths of which must be in lawful money, and three-fifths of which may be in three per cent. certificates, or in cash deposits with the redemption agent selected by the bank. The banks of Boston and of the other cities designated in section thirty-one of the National Currency Act, are required to have a reserve of twenty-five per cent. of their circulation and deposits, two-fifths of which must be in

lawful money, and three-fifths of which may be in these certificates, or, if preferred, one-half of this reserve may be in cash deposits, with the Redemption Agent in New York, two-fifths in lawful money, and the remaining one-tenth in the three per cent. certificates. I am, very respectfully,

JNO. JAY KNOX, Deputy and Acting Comptroller.

CHARLES G. NAZRO, President North National Bank, Boston.

We may add to the foregoing statements that the "lawful money" required as reserve by law may consist of gold and silver coin, of greenbacks, or of Compound Notes at their face value, while under the designation of country banks are included all those outside of the cities of New York, Boston, Philadelphia, Chicago, Cincinnati, New Orleans, St. Louis, Louisville, Detroit, Milwaukee, Cleveland, Pittsburgh, Baltimore, Albany, Leavenworth, San Francisco and Washington.

Below we give the returns of the Banks of the three cities since Jan. 1 :

NEW YORK CITY BANK RETURNS.

Date.	Loans.	Specie.	Circulation.	Deposits.	Legal Tend's.	Ag. clear'gs
January 5.	\$257,852,460	12,794,692	33,762,779	202,533,564	65,026,121	458,967,797
January 12.	258,935,458	14,618,477	33,535,103	202,517,098	63,246,870	605,182,095
January 19.	255,093,223	15,855,307	33,854,928	201,500,115	63,335,336	590,040,086
January 26.	251,674,801	16,014,007	33,957,198	197,952,076	63,420,569	568,823,914
February 3.	251,294,355	16,335,98	34,295,947	200,511,596	65,944,541	512,477,253
February 9.	259,248,235	16,157,257	32,777,00	198,241,835	67,628,992	548,533,532
February 16.	253,131,328	14,79,628	32,955,309	196,072,329	64,442,940	425,533,529
February 23.	257,823,994	13,613,456	33,006,141	198,480,347	63,153,866	442,574,696
March 2.	256,56,430	11,679,881	32,294,433	198,018,917	61,014,195	462,534,519
March 9.	262,114,558	10,283,138	33,409,811	200,312,594	64,232,440	544,173,960
March 16.	263,012,974	9,968,728	33,400,685	197,958,040	62,513,019	496,558,19
March 23.	259,400,315	9,43,918	33,519,401	19,375,615	60,904,968	472,023,8
March 30.	255,82,364	8,52,619	33,669,195	198,480,250	62,459,811	469,560,002
April 6.	254,470,027	8,133,813	33,774,573	198,861,269	59,021,775	531,535,154
April 13.	250,103,178	8,855,290	33,702,047	192,861,286	60,261,515	447,814,573
April 20.	247,561,781	7,632,585	33,648,971	194,090,256	64,096,916	537,814,573
April 27.	247,737,381	7,404,304	33,601,386	187,674,341	67,290,351	443,494,422
May 4.	250,871,558	9,903,177	33,571,747	195,731,073	70,567,407	550,590,000
May 11.	253,682,829	14,95,690	33,595,969	200,345,839	69,639	534,819,709
May 18.	257,961,874	15,567,263	33,631,301	201,488,854	69,501	503,673,736
May 25.	266,091,605	14,068,667	33,697,253	193,073,345	66,244	431,732,322
June 1.	252,791,514	14,617,070	33,747,089	190,886,143	67,459,827	442,675,026
June 8.	250,477,298	15,699,038	33,719,088	184,780,335	66,117	461,734,210
June 15.	246,223,465	12,656,389	33,707,199	180,817,768	57,294	460,969,609
June 22.	243,640,477	9,399,585	33,633,171	179,477,140	63,823,93	442,442,594
June 29.	242,547,954	7,768,996	33,542,560	186,313,257	70,934,755	453,542,594
July 6.	246,361,227	10,853,171	33,660,397	191,534,319	71,196,478	454,031,000
July 13.	247,913,009	12,715,404	33,653,869	197,873,063	73,965,703	462,360,460
July 20.	249,589,255	11,197,700	33,574,949	199,435,963	73,301	431,530,526
July 27.	251,943,830	8,73,694	33,596,859	200,606,856	74,840	451,007,126
August 3.	254,940,016	6,461,949	33,591,117	201,153,754	703	469,021,703
August 10.	253,427,340	5,811,997	33,565,878	199,408,705	481	450,965,085
August 17.	253,332,411	5,930,537	33,669,757	194,045,591	733	414,320,517
August 24.	250,697,679	6,023,535	33,736,949	188,744,161	680	431,498,687
August 31.	247,877,693	7,371,595	33,715,186	190,862,315	671	365,361,546
September 7.	250,224,560	7,967,619	33,706,173	195,182,114	445	441,707,265
September 14.	254,160,587	8,184,946	34,015,225	193,086,776	441,903	514,083,723
September 21.	254,794,067	8,617,498	34,056,443	185,603,930	440,335	502,142,300
September 28.	251,918,751	9,496,103	34,147,309	181,439,410	55,991,596	600,639,719
October 5.	247,934,369	9,368,608	34,025,521	178,447,423	55,585	570,187,634
October 12.	247,833,133	9,603,771	33,006,541	177,128,634	56,117,923	545,543,270
October 19.	247,553,911	7,319,010	34,057,440	173,438,875	56,515,433	558,102,797
October 26.	246,311,713	6,161,164	33,959,080	172,964,123	56,281,913	511,739,607
November 3.	247,237,498	8,974,535	34,037,076	173,909,734	57,396,067	481,260,673

PHILADELPHIA BANK RETURNS.

Date.	Legal Tenders.	Loans.	Specie.	Circulation.	Deposits.
January 5.	\$20,309,064	52,312,317	908,668	10,838,830	41,803,377
January 12.	20,003,355	53,523,491	908,830	10,830,577	41,622,321
January 19.	19,443,069	53,454,807	877,548	10,831,595	30,043,635
January 26.	19,333,874	52,163,473	880,583	10,834,693	33,001,719
February 3.	19,266,123	55,35,180	871,564	10,430,818	39,502,723
February 9.	19,556,350	54,284,829	872,614	10,449,923	39,511,265
February 16.	18,892,747	53,673,180	897,110	10,532,973	40,055,777
February 23.	17,837,693	53,894,731	841,232	10,596,434	39,046,013
March 2.	18,150,687	51,970,173	816,843	10,511,800	39,267,593
March 9.	17,521,705	51,661,463	822,655	10,573,068	37,314,673
March 16.	16,955,613	50,518,394	853,083	10,560,911	37,099,661

Date.	Legal Tenders.	Loans.	Specie.	Circulation.	Deposits.
March 23	16,071,780	50,872,490	807,4 3	10,611,967	31,581,845
March 26	16,866,948	50,880,806	408,148	10,681,683	31,150,283
April 6	16,683,746	50,998,381	64,719	10,861,615	31,706,595
April 13	16,188,407	51,283,776	546,685	10,846,867	31,827,683
April 20	16,583,396	51,611,44	486,585	10,847,284	32,820,580
April 27	16,737,001	51,890,959	382,817	10,838,091	32,829,870
May 4	17,196,658	52,084,267	386,053	10,839,695	32,871,064
May 11	17,278,919	52,474,568	408,763	10,827,953	32,172,169
May 18	16,770,491	52,896,390	402,978	10,680,681	32,220,633
May 25	16,019,180	53,536,170	369,132	10,685,530	32,778,783
June 1	16,681,109	52,747,308	334,368	10,687,488	32,332,144
June 8	16,580,730	53,158,124	346,615	10,642,490	32,222,610
June 15	16,800,010	53,192,049	348,261	10,646,298	32,171,269
June 22	15,964,434	52,968,441	373,366	10,642,294	32,323,279
June 29	16,106, 61	52,538,963	365,187	10,641,811	32,616,847
July 6	16,722,675	52,120,373	461,961	10,64 201	32,077,451
July 13	16,334,914	52,502,353	419,399	10,641,770	32,885,223
July 20	16,608,860	53,150,569	371,744	10,637,661	32,170,418
July 27	16,662,112	53,104,475	333,118	10,638,760	32,899,640
August 3	16,783,198	53,427,640	309,068	10,625,925	32,094,433
August 10	15,909,195	53,117,569	344,979	10,637,761	32,811,477
August 17	15,767,146	53,549,449	317,389	10,628,810	32,304,855
August 24	16,682,616	53,399,090	314,343	10,628,224	32,429,631
August 31	15,717,909	53,784,687	307,658	10,626,866	32,323,253
September 7	16,249,658	53,776,452	379,714	10,628,794	32,428,559
September 14	16,060,733	53,792,208	265,691	10,623,707	32,323,247
September 21	15,845,463	53,540,501	222,528	10,628,744	32,222,203
September 28	15,513,794	53,665,569	272,586	10,629,976	32,162,005
October 5	15,567,404	53,041,100	258,303	10,627,921	32,424,213
October 12	15,097,419	52,927,767	346,714	10,628,896	32,343,212
October 19	14,947,009	53,020,283	227,125	10,636,016	32,326,704
October 26	14,947,184	52,97 563	216,746	10,634,907	32,535,465
November 2	15,0 9,854	52,684,077	213,590	10,640,680	32,604,401

BOSTON BANK RETURNS.

(Capital Jan. 1, 1866, \$41,900,000.)

	Loans.	Specie.	Legal Tenders.	Deposits.	Circulation.	
					National.	State.
January 7	\$97,009,743	1,188,461	17,033,337	40,824,618	94,580,387	812,664
January 14	98,401,778	1,334,300	16,829, 36	40,346,316	94,997,446	811,749
January 21	96,296,939	1,078,160	16,59 , 99	38,679,604	94,376,162	301,911
January 28	97,691,339	1,068,339	16,816,481	39,219,341	94,716,697	302,298
February 4	97,748,461	956,569	16,394,604	39,708,059	94,691,075	306,014
February 11	97,364,163	873,806	1 1,082,479	39,474,353	94,486,663	305,603
February 18	96,949,418	929,940	15,398,338	38,900,5 0	94,766,420	305,603
February 25	96,33 900	779,409	16,741,046	37,992,963	94,663,606	303,226
March 4	96,054,737	968,887	15,9 8,108	38,316,673	94,675,767	301,480
March 11	96,078,975	696,447	15,719,479	38,218,528	94,344,631	305,480
March 18	96,156,446	648,194	16,370,979	38,751,783	94,406,623	302,188
March 25	92,661,090	516,184	16,567,905	36,751,723	94,733,723	299,091
April 1	91,732,347	423,113	17, 12,423	37,056,888	94,633,376	296,925
April 8	91,679,549	456,761	16,860,418	37,368,775	91,561,522	296,011
April 15	91,712,414	376,343	16,816,365	37,318,526	91,568,219	297,305
April 22	92,472,816	343,713	16,549,598	38,307,548	91,562,300	296,701
April 29	92,363,923	329,854	16,926,664	37,587,092	94,61 437	294,923
May 6	92,671,149	6 9,873	16,571,786	38,721,7	94,784,253	293,806
May 13	92,498,114	517,697	16,662,421	38,604,7	94,509,993	293,614
May 20	92,632,587	507,806	16,499,519	37,674,	94,536,469	293,491
May 27	92,239,677	441,073	16,888,361	37,123,	94,806,800	290,961
June 3	92,694,925	671,636	17,178,901	37,026, 60	94,739,794	279,275
June 10	92,486,167	486,767	16,767,854	36,083,666	94,804,163	286,766
June 17	92,736,483	511,096	16,719,795		94,771,778	277,048
June 24	92,961,163	470,544	16,768,396		94,766,947	297,294
July 1	92,996,708	617,466	16,065,141	36,089,663	94,737,373	296,353
July 8	92,387,558	915,498	16,065,466	36,089,663	94,784,253	293,806
July 15	92,646,468	833,466	15,397,928	38,640,421	94,509,993	293,614
July 22	92,096,5 1	660,303	15,427,635	38,333,613	94,744,291	292,696
July 29	92,594,214	361,878	15,548,401	38,548,722	94,658,742	296,563
August 5	92,387,558	473,466	15,51 084	38,396,460	94,652,975	293,260
August 12	97,008,878	412,317	15,196,701	38,293,676	94,670,832	288,673
August 19	96,901,697	363,127	14,697,154	36,907,686	94,613,921	292,607
August 26	96,945,497	396,576	15,175,423	35,700,608	94,707,736	291,963
September 2	97,019,818	400,680	15,396,683	35,610,803	94,734,144	290,677
September 9	97,736,719	510,544	14,674,660	35,966,160	94,783,967	292,740
September 16	92,029,039	453,039	13,423,333	35,060,269	94,817,359	296,732
September 23	97,023,167	467,016	12,684,109	35,193,755	94,801,394	292,123
September 30	96,406,065	453,399	12,987,468	35,536,594	94,806,269	293,532
October 7	95,777,109	417,073	13,046,359	35,394,838	94,806,269	293,299
October 14	94,763,817	478,161	13,5 3,653	35,989,155	94,717,684	292,370
October 21	95,396, 46	444,811	13,003, 31	36,580,900	94,717,684	292,704
October 28	95,902,148	399,343	13,003,546	37,361,618	94,678,0 6	293,222
November 4	96,186,408	569,136	14,227,418	37,879,121	94,698,409	293,061

THE BOOK TRADE.

An Essay on Man. BY ALEXANDER POPE.—With fifteen original illustrations, and Notes by S. R. Wells. One vol., 12mo, fancy cloth, beveled boards, gilt, \$1; paper, 50 cents.

Whatever may be said by theologians concerning the orthodoxy of this great poet's religious views, his *ESSAY ON MAN* will continue to be regarded one of the master-pieces of English verse, and will attract the attention of and instruct the intelligent and thoughtful.

The views of Pope on the Great Creator and His wondrous works, as enunciated in this poem, are unsurpassed for grandeur and deep-toned thought; and no writer, either of ancient or modern times, has so infused his sentiments and spirit into the literature of his nation by a single production, as Alexander Pope. The publisher of this new edition, appreciating the lack of an illustrated *Essay on Man*, and willing to do the public a substantial favor, has caused the work to be carefully illustrated, annotated from the phrenological point of view, and printed in an attractive style on superior paper. A succinct biography of the poet, and his highly esteemed "Universal Prayer," are published with the "Essay," making, together, a very desirable volume for the library or the center-table.

CONTENTS FOR NOVEMBER.

No.	PAGE	No.	PAGE
1. Central Statistical Commission of Austria; Analyses of Report for 1865.....	339	18. Consequence and Divergence of Western Trade.....	339
2. Railroad Earnings for September.....	338	19. The Grasshopper Army.....	340
3. Railroad Legislation.....	339	20. Stocks of Merchandise at New York	341
4. The Scholars and the Philistines in Political Economy.....	355	21. San Francisco Movements of Ballies	347
5. Mineral Productions of Great Britain.....	360	22. A Canal from the Missouri to the Gulf	355
6. The National Banks.....	361	23. New Coal Discoveries.....	356
7. Trade of Great Britain and the United States.....	366	24. Primary Education in England.....	369
8. Liability for the Counterfeit Seventy-Three Notes.....	369	25. Chicago, Burlington and Quincy Railroad.....	370
9. Our Foreign Exchanges since 1861.....	371	26. The National Banks of Boston.....	381
10. The Routes of the Precious Metals.....	374	27. United States Mint for October.....	383
11. Rensselaer and Saratoga Railroad.....	378	28. Assistant Treasurer's Statement for October.....	388
12. Prospects of the Gold Premium.....	377	29. Obligations of Banking Institutions as Ballies.....	396
13. Crops of 1866 in Europe.....	380	30. The Public Debt.....	398
14. Memphis and Charleston Railroad.....	380	31. Commercial Chronicle and Review.....	394
15. The Beer Trade in Germany.....	383	32. Journal of Banking, Currency, and Finance.....	423
16. Western North Carolina Railroad.....	384	33. The Book Trade.....	406
17. Artificial Meerschaum.....	385		

The following advertisements appear in our advertising pages this month:

MERCANTILE.

Little's Fire & Burglar-Proof Safes—198 B'way
 Lewis Andendried & Co.—110 Broadway—Anthracite and Bituminous Coal.
 A. B. Sands & Co.—139-141 William St.—Drugs
 Duryea's Malzens—166 Fulton street.

BANKERS & BROKERS.

Duncan, Sherman & Co.—Cor. Pine & Nassau.
 L. P. Morton & Co.—30 Broad Street.
 Ninth National Bank—386 Broadway.
 Ninth National Bank—363 Broadway.

Lockwood & Co.—94 Broadway.
 Barstow, Eddy & Co.—26 Broad St.
 Gilmore, Dunlap & Co.—Cincinnati.
 DeWitt, Kittle & Co.—68 Wall St.
 Vermilye & Co.—44 Wall St.
 Eugene Kelly & Co.—38 Wall St.
 Simon De Visser—63 Exchange Place.

INSURANCE.

Fidelity Insurance Co.—17 Broadway.
 Marine—Great Western Insurance Co.
 Fire—Hope Fire Ins. Co.—98 Broadway

THE MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

DECEMBER, 1867.

THE DOMINION OF CANADA AND THE RECIPROCAL TRADE.

Absorbed as we are in the regulation of our own internal affairs, after the derangements of a great war, it is not surprising that we should overlook the importance of cultivating advantageous relations with our neighbors. It is nevertheless a fact we can ill afford to ignore that on our northern frontier we have a young nationality, rapidly growing in population and rising into commercial importance. Our misfortunes have indirectly advantaged Canada; for while the war has augmented the burthens of our people and diminished the profits of industry, our neighbors have escaped these ill fortunes and thus gained a higher vantage ground in competing with us for the markets and the surplus population of the Old World. The Dominion of Canada now occupies the same position, in respect to foreign trade, we occupied in 1795, while its population is about 600,000 less. Compared with our rapid growth, its increase in population may appear trivial, but its progress, nevertheless, is equal to our own at the same stage of our history. Judging from the progress of the provinces since 1860, it is not to be deemed among the improbabilities of the future that fifty years hence the population of the united provinces may equal that of the United States at the date of our last census. It is estimated by the Canadian authorities that since 1861 the population of all the provinces combined has increased from 3,300,000 to about 4,000,000; and although this increase may not be considered in itself as specially important yet it indicates a ratio of progress which, at no very remote period, is destined to give to our neighbors a commanding national importance. The following statement shows the area of the respective provin-

ces, their populations in 1861 and the estimated population in 1867, as published in the Canadian reports:

AREA AND POPULATION.

	Area sq. m.	Population, 1861			Population est. Jan 1, 67.
		Catholic.	Foreign.	Total.	
Ontario (U. Can.).....	191,260	358,141	484,133	1,396,091	1,504,086
Quebec, (L. Can.).....	210,120	943,253	98,641	1,111,566	1,266,880
New Brunswick.....	37,105	85,228	43,881	253,047	293,084
Nova Scotia.....	18,660	86,231	31,523	380,597	393,721
Existing Dominion.....	377,045	1,372,913	653,173	2,090,561	2,754,801
Prince Edward.....	2,100	35,852	13,257	80,857	97,443
Newfoundland.....	40,200	37,214	12,414	124,298	130,000
Projected Dominion.....	419,345	1,465,979	678,843	2,395,706	2,975,344

The commerce of the Dominion is large compared with its population. The combined imports and exports of the former Province of Canada, for the last fiscal year, amounted to \$105,000,000; which is equivalent to about \$34 per head of population. In 1860 the foreign commerce of the United States averaged \$27 per capita. This comparison shows great vigor and prosperity on the part of our neighbors. The standing of the new Dominion in respect to tonnage and foreign commerce is shown by the following statement:

COMMERCE AND TONNAGE; AVERAGE FIVE YEARS, 1861-65.

	Tonnage.		Commerce.		Shipping owned '65.
	Cleared.	Entered.	Exports.	Imports.	
Canada.....	953,194	941,881	\$36,081,486	\$40,493,535	\$330,429
New Brunswick.....	121,727	674,603	4,786,978	7,166,630	308,686
Nova Scotia.....	772,017	929,929	6,794,253	10,647,192	352,068
Existing Dominion ..	2,446,868	2,546,913	47,662,623	58,307,358	908,122
Prince Edward.....	173,657	151,405	1,223,869	1,453,550	39,549
Newfoundland.....	123,319	143,884	5,427,331	5,218,416	87,983
[Projected Dominion.....	2,751,844	2,846,151	54,313,823	64,969,324	1,035,744

The tonnage above given for Canada is the seaward tonnage; besides which there cleared from inland ports to the United States on the average of the same five years 3,291,069 tons, and entered at inland ports from the United States 3,144,207 tons. This is exclusive of ferry navigation.

Thus far the Provinces have conducted their finances with commendable economy. Their total debts amount to about \$75,000,000; an aggregate, it is true, equal to the whole debt of the United States seven years ago; but yet less than one-fifth the rate per capita of the present Federal and State debts of this country. The total governmental expenditures of the Provinces are, in round numbers, \$15,000,000; which, with a population of four millions, amounts to a burthen of \$3 75 per head of the population. Our own Federal taxation at present averages \$13 95 per capita, to say nothing of our State burthens. As illustrating the finances of the several sections of the Dominion, we present the following statement of receipts, expenditures and debts:

REVENUE, EXPENDITURES, DEBT, ETC., 1865, (EXCLUSIVE OF LOAN ACCOUNT)

	Receipts.		Expenditures.		Public debt.
	Customs & excise.	Total.	Interest.	Total.	
Canada.....	\$6,943,716	\$10,435,259	\$3,768,773	\$11,534,691	\$61,744,651
New Brunswick.....	775,941	1,070,604	360,596	1,168,974	5,821,443
Nova Scotia.....	1,047,891	1,517,306	264,388	1,470,806	5,637,455
Existing Dominion.....	8,767,548	13,023,169	4,413,877	14,173,071	72,193,544
Prince Edward.....	163,643	217,783	17,876	214,396	161,500
Newfoundland.....	427,509	482,460	49,744	579,453	1,161,564
Projected Dominion.....	9,875,705	13,738,361	4,481,387	14,966,950	74,515,673

In reviewing the resources and condition of the Dominion we have purposely kept in view our own relative position in the respective details, because it appears to be thought good national policy to exclude our neighbors to a certain extent, from commercial intercourse with the United States. The physical conditions of Canada correspond very closely with those of the most active and prosperous sections of our own country. Its natural conditions for trading in the products of the forest, the field and the sea also compare favorably with our own; while as respects governmental burthens—a matter bearing very essentially upon the inducements to both labor and capital—it has important advantages over ourselves. Can it then be considered wise statesmanship to shut ourselves out from intercourse with a people thus circumstanced, and drive them as competitors into other markets where we are ourselves sellers? So homogeneous are the interests of the two countries that there has long been a latent feeling among our people in favor of the annexation of the Provinces. One motive of the repeal of the Reciprocity Treaty was an idea that the Canadians might thereby be made to feel their dependance upon our trade, and to infer hence the desirableness of political union. Events, however, have proved that the means we selected were ill-adapted to the end sought. Canada has suffered little, while a heavy penalty has fallen upon some of our own interests. The imposition of a heavy duty upon timber has caused severe injury to our shipbuilding interest, otherwise subjected to embarrassing disabilities; while it has placed a premium on shipbuilding at St. Johns and in the ports of Great Britain. The returns of the former Province of Canada show that during the last fiscal year their imports increased six millions, and that the increase was entirely with Great Britain, while the purchases from the United States were below those of 1865-66; indicating that the diversion of the exports of the Province to other countries is attended with an increase of its purchases from such countries. The exports of the Province show a decline of about five millions upon 1865-66, the prospect of the abrogation of the treaty having induced large purchases by our people to save the subsequent import duties, but they are, at the same time, about fifteen millions in excess of the figures of 1864-5, showing that our neighbors are by no means dependent upon us for a market for their products. It was certainly a most unwise policy which led to the abrogation of the treaty. The fact of our being able, under the agreement, to exchange a much larger amount of products than had proved possible previously, was a sufficient evidence of its advantage to both parties, and no stronger argument for its continuance needed to be advanced, for every exchange implies a mutual profit. Now, however, we are beginning to see the results of our act; and yet, in this year's trade returns we only have a slight indication of what we may expect in the future. The natural course of Canadian trade is to this country: but as we have built a wall around ourselves, and thus obstructed the natural channel, a new one is being forced. The movement at first was hardly perceptible, but is at length beginning to indicate its course; and let it once work out for itself another route, and it will require more than the restoration of the reciprocity treaty to restore it. We have a good illustration of this idea in the course of Western trade, which formerly sought the seaboard by the way of New Orleans. The war shut up the

Mississippi and all trade was forced towards the East. Now, although that river has long been open, the new channel continues to carry off the prize.

But there are already among us palpable symptoms of a desire to negotiate a new treaty. Several interests complain of injury from the repeal, while none profess to be specially benefitted. Probably the question of resuming reciprocal relations with the New Dominion may be introduced into Congress at the coming session; and we trust will result in the re-opening of negotiations for that object.

EXTINGUISHMENT OF THE PUBLIC DEBT.

BY A NEW YORK MERCHANT.

Let Congress, at the next session, authorize the Secretary of the Treasury to call in the National Bank circulation, as fast as it can be done, say within sixty or ninety days, and issue United States legal-tender notes in place of it, the legal-tender notes to be paid for by the banks with coin interest bonds.

The Government to redeem these legal-tender notes, at the rate of five millions of dollars monthly in gold, to be paid to the banks *pro rata* on their circulation, said redemption to commence as soon as the bank circulation is all in, and all other paper money circulation to be prohibited, except the fractional currency.

This redemption to continue for five years, at the end of which time the banks are to resume specie payment, and thereafter to keep on hand one quarter of the circulation in coin.

Upon the resumption of specie payment, the circulation of the legal-tender notes to be apportioned among the banks, and the Secretary of the Treasury to be authorized to increase the amount not exceeding one hundred millions of dollars, whenever two-thirds of the banks in interest, by resolution, shall request him to do so. The increase to be paid for by the banks in coin interest bonds.

The Secretary of the Treasury to loan to the banks, in case of panics, to the extent of thirty or fifty millions of gold, whenever necessary to sustain them, upon Government bonds as security, and at such rates of interest as will induce its return to the Treasury at the earliest practicable moment.

Upon the return to specie payment, United States notes to cease to be legal-tenders.

The three hundred millions of legal tenders to be issued in place of the National Bank circulation, could be apportioned at the time of issue, and the old issue be redeemed. This would save much expense, as it would leave but one hundred millions of the old issue to be changed.

This plan will release the reserve of legal-tenders now held by the bank, and will make the entire circulation in United States legal tender notes about seven hundred millions, and some ninety millions more than at present.

The legal tenders, when redeemed in gold, will be in effect paying the bonds which were taken from the banks in gold, and will definitely settle the question as to how the principal of the coin interest-bonds is to be paid. This being settled, an immediate rise in our securities might be looked for, both in Europe and this country, and for such an active demand from Europe as would, to a large extent, prevent the shipment of gold for some considerable time to meet the trade indebtedness.

The gradual return to specie payment would not seriously affect the values of merchandise, and thereby create distress; but, on the contrary, we might look for an active and increasing trade in all branches of business, and a revival of that confidence which a feasible and definite policy will surely bring.

The banks will find their compensation for the loss of their circulation, and the interest on the bonds, in the sale of the gold, which they can dispose of for the first three years, as they will receive for the legal-tenders, during the five years, three hundred millions; and also in the increase in the value of the balance of the securities now held by them. We shall place our financial affairs upon a sound and firm basis, and give to the people a uniform currency, which will be recognised throughout the United States as being beyond the possibility of ever becoming worthless. That the Government should supply the circulation, is now generally conceded; and it must also be conceded, that there is no more reason why the Government should supply the banks with capital, in the shape of circulation, in order that they may profit, both by the securities held for its redemption and the circulation, upon the plea that the interest of the manufacturer and the trader, and through them, the country is largely benefited, than that capital should be furnished by the Government to the country merchant. Wherever these facilities are needed, there capital will locate, and will afford them at such rates as will be satisfactory to the banker and the accommodated.

Now, let us see whether the Government can pay the interest on the coin interest indebtedness, and redeem the legal-tender notes, as proposed. When all of the Seven-Thirties are converted, as they soon will be, the coin interest indebtedness will be about twenty-one hundred millions. This, by the issue of the three hundred millions of legal-tenders, will be reduced to eighteen hundred millions.

The annual interest will be.....	\$108,000,000
The annual redemption legal-tenders.....	60,000,000
<hr/>	
To be paid annually in coin.....	\$168,000,000
The receipts from customs.....	150,000,000
<hr/>	
Leaving to be provided for.....	\$18,000,000

Which can be taken from the gold reserve now in the Treasury. As the receipts from the customs are rapidly increasing, and the one hundred and fifty millions being considered the lowest point they will be likely to reach under the present tariff, the reserve, in all probability, would not be touched for this purpose.

With the revival of business, and the general confidence restored, the Government will be able to reduce the rate of taxation, and with an eco-

nomical administration of its affairs, a thorough enforcement of the Internal Revenue laws, and with no unnecessary appropriations by Congress, the whole of the currency interest and floating indebtedness could be paid by the time specie payments are to be resumed, and the entire debt, if we have no war, within twenty years.

The resumption of specie payment will be to the consumer equal to a reduction of the tariff of forty per cent., as he will save, in the cost of the goods, the premium it now takes to purchase the gold to pay for them; and as the redemption of the legal tenders will cease at the end of the five years, a further reduction of the tariff could be made.

It may be asked why the banks, with no circulation of their own, should be required to redeem the circulation of the Government? Because their location and facilities would make them the best agents the Government could use.

To establish sub-treasuries all over the country, to afford equal facilities, would require a large increase of Government offices and great expense, and would tend to centralise the power in the Government, and give the banks really no right to have any voice in deciding the necessity of an increase in the circulation.

Now, let us see what the prospects are of resuming specie payment under the present banking system. The National Bank circulation being redeemable in legal-tenders, it devolves upon the Government to provide the coin to redeem its circulation. Conceding that no financial system can be sound or safe, unless based upon that, whose value is unchangeable, and which is recognized throughout the civilized world as the true standard of values, we cannot expect to reach that stability and prosperity so essential to the development of our resources, until we have placed our system of finance upon this standard. The question then arises how this object can be accomplished. I can see but two ways. The first is, for the Government to accumulate sufficient gold in the Treasury to justify the redemption of the circulation now out. This must result in a rapid advance in the price of gold, which is needed for duties, and in its attendant evil, inflation, and a sudden and disastrous reaction upon the resumption of specie payment. To save these inflated values, I doubt not a run would be made upon the Treasury, taking the time of the payment of the interest, as the most favorable moment, to such an extent as would deplete it of every dollar in less than a week's time.

The second way is to go on and contract the circulation to such a point as it can be readily and surely met by the gold that can be accumulated without seriously affecting the market. This course must inevitably result in such stringency in the money market, as will necessitate the enforcement of sales of merchandise and securities at any price, in order to realize to meet engagements; all will be sellers, and the importer having no purchasers for his goods, must cease his importations and allow the goods now in bond to remain, and the Government, instead of obtaining gold from its custom duties to redeem its bills, will find it difficult to pay the interest upon its indebtedness. Already the cry is loud and earnest for more circulation, and any further considerable contraction must result in disaster and ruin. Under this state of affairs the burden of taxation will become doubly oppressive, and the people, seeing no prospect of relief, will be driven to *repudiation* as the only remedy left them.

The next question that presents itself is—Is it the present policy of the Government to redeem the legal-tenders in specie at all? Such would not appear to be the intention, if the following extracts from the letter of the Secretary of the Treasury, dated October 7th, 1867, are to be taken as an indication. He states—"The United States notes were issued under the pressure of a great necessity, and are, by authority of Congress, being rapidly withdrawn from circulation. No more can be issued under existing laws, nor can I believe that any considerable number of the members of Congress would favor an additional issue for any purpose whatever, much less for the purpose of paying bonds in violation of the express understanding under which they were negotiated."

"The policy of contracting the circulation of United States notes by Congress, and being steadily pursued by the Secretary, should of itself, even if the honor of the nation were not involved in the question, satisfy holders that Five-Twenty bonds will not be called in and paid before maturity in a depreciated currency."

It is very evident, from the foregoing, that the policy is to retire all the legal-tenders, and leave to the National Banks the entire circulation; and should their present issue be found insufficient, as it will be, to transact the business they will be authorized to increase it, with still further profit to themselves.

What assurance have we that the banks will resume specie payment, when all of the legal-tenders are withdrawn from circulation, other than the general supposition that the matter will regulate itself? It certainly will not be found in the result already exhibited. Some fifty millions have now been withdrawn, and instead of the premium on gold having been correspondingly reduced, it is some ten per cent. higher than it was before the contraction commenced. Under this policy, with the National Bank circulation increased to five hundred millions—the amount considered necessary to transact the business of the country by some of our best financiers—we may abandon all thought of resuming specie payment, and console ourselves with the flattering idea, that because this currency is secured by Government bonds it is "the best the world ever saw."

Shall the receipts of the Internal Revenue be used to retire the legal-tenders, instead of reducing the national interest-bearing indebtedness? Shall the people be borne down with taxation to retire a circulation which the Government alone should furnish? Shall the old banking system be revived, to be periodically followed by distrust and suspension? Or, shall we have a system that will reduce the national indebtedness three hundred millions at once, lighten the burden of taxation, and give us a sound and stable currency, based on gold?—are the momentous questions herewith presented.

This plan will accomplish the following results:

First.—It will cancel three hundred millions of the coin-interest indebtedness.

Second.—It will redeem, within the five years, three hundred millions of the legal tender notes in gold.

Third.—It will virtually cancel four hundred millions of the floating indebtedness, by retaining that amount of the United States notes

bearing no interest for perpetual circulation, which are now being retired at the rate of four millions a month.

Fourth.—It will enable the Government to reduce the taxes at least forty-eight millions annually, that amount being now taken from the internal revenue receipts, to retire the legal tenders. As this sum is considerably more than is now received from the tax on incomes, that, the most objectionable feature of our tax system, could be dispensed with.

Fifth.—It will enable Government to cancel one hundred millions more of the coin interest indebtedness, should the four hundred millions prove insufficient for the business of the country, as probably it will.

Sixth.—It will enable the Government, through its agents, the Banks, to resume specie payment at the end of the five years, as stated.

Seventh.—It will violate no obligation of the Government, and will open the avenues of trade throughout the whole country, by the confidence it will give to all.

By what other plan can the national indebtedness be reduced seven hundred millions, and the taxes forty-eight millions, annually; or such favorable and important results be produced?

OUR DEBTS AND RESOURCES.

On former occasions we have remarked upon our largely increased taxation, with the purpose of enforcing upon our legislators the necessity for the strictest economy in all appropriations for Federal, State and municipal governments. A long and costly war with the indefinite issue of paper money has engendered a spirit of extravagance which must be checked. Statements of our present burdens tend to this end; they convey a forcible, practical lesson which is much needed at this time. And yet, notwithstanding the usefulness of such statements, incorrect inferences are sometimes drawn from them. Because we are in debt some jump to the conclusion that we are bankrupt. We notice for instance the tables we prepared and published sometime since, showing the rates of taxation in our leading cities, recently copied by a correspondent of the *London Times*, who called them official, and based arguments upon them to show our inability to pay our debts. It is hardly necessary to say that such conclusions find no justification in the facts stated. We admit that we are in debt, and, compared with anti-war times, very heavily in debt, and we insist that there is great need for economy; we claim too that our tax machinery is very unphilosophical and cumbersome; and yet our ability and disposition to pay all just obligations are beyond question. The experience of the last two years in raising revenue, and consolidating and reducing our Federal debt, bring out in strong light the resources and capabilities of the country. It was a question in the minds of Europeans in 1864 whether a democratic people would submit to be taxed; no one doubts

it now. It was argued then that our burden was more than we could bear, and yet we have paid all our expenses, and reduced our aggregate debt from 2,874 millions in the fall of 1865, to 2,491 millions as given in the last statement. It was claimed that though we might work through our long debt, our short obligations would surely try us; but, on the contrary, since 1865 the temporary loans and debt certificates have disappeared from the schedule altogether, the greenback currency has been curtailed from 433 millions to 357 millions, and the Seven-Thirties from 830 millions to 334 millions, as also appears in the last monthly statement. When we remember that this is the history of the period immediately succeeding a long war, and among a people unused to taxation, and with no experience in raising large revenues, all will admit that we hardly deserve to be called bankrupt.

Nor are our city and State taxes more than we can very easily, and if they are necessary, very willingly bear. All that our people wish to be convinced of is that they are not being plundered, and that their public servants are economizing their resources. The latter, they insist, shall be done and the former avoided if possible. A moment's reflection as to the aggregate taxable property in New York State shows that with honesty and economy in the future there is no ground for fear. We cannot, however, agree with a recent writer on our State finances, who attempts to show that a debt is not a debt, and the inference from whose remarks is that we pay no taxes. In a former article, before referred to, we gave tables proving very decidedly that taxation among us is no myth but a veritable reality. And yet the resources of the State, both in the actual aggregate of taxable capital, and in the productive industry of the population, are fully ample to sustain the burden. The assessors have but to do their duty thoroughly, to obey the laws of the State just as they read, in regard to making assessments and an amount of taxable property would be found that would surprise everybody. The assessed valuation of such property is 1866 amounted to \$1,639,432,651. Nobody can doubt that the real value is three times that sum. A moment's examination of the State census of 1865 will make our assertion more clear and difficult of contraverting.

The total number of dwellings enumerated is 594,045, the value of which was estimated at \$977,121,378; besides 66,114 to which no value was computed. If their value is reckoned in the same ratio, the sum total would be about \$1,080,000,000. It is quite unnecessary to remark that the dwellings enumerated could not be purchased at a fair sale for an amount equivalent to the entire assessed valuation of the State. The same census report gives us the value of farms in the State at \$920,349,331; of live stock \$127,072,554; of tools and implements \$21,181,099½—a total of \$1,068,602,984½. It would not be far out of the way to declare that the property included in this category is also equivalent in value to the entire assessment of the State. The census also embraces returns from 24,527 manufacturing establishments, with a capital of \$227,674,187, and an aggregate value of product amounting to \$463,609,877. There are no data relating to the capital employed in commerce. Household furniture almost

wholly escapes assessment, yet its aggregate value must be fully two-thirds of the value of dwellings. In 1868 there were insured in the insurance companies doing business in this State, personal property to the value of \$1,471,000,000, which nobody needs to be informed was but a fraction of the entire amount. The aggregate of these few items is as follows :

Value of dwellings.....	\$1,080,000,000
Farms, &c.....	1,068 602 934
Manufactories.....	227,674,187
Insured personal property less amount actually assessed..	1,138,000,000

Total.....\$3,514,277,171

It will be seen from these imperfect statistics that the probable value of property in the State of New York cannot be short of \$6,000,000,000, and estimating the net profit at 6 per cent., we should have as the annual net income of the State 360 millions—a fair estimate of the resulting profits after deducting all direct taxes. The gross income it is of course very difficult to indicate; but these figures show clearly enough that the production of the State is able to sustain a heavy volume of taxation.

Now, if we enquire as to the annual burden upon this property, we shall find that the State of New York is charged with a direct tax for expenses of Government, maintenance of schools, interest, etc., of about twelve millions of dollars, and that the local taxes probably amount to fifty millions more. It is proper, however, to remark that a considerable portion of this local taxation is for the purpose of defraying the principal of the indebtedness, and therefore cannot be regarded as permanent. In a short time the aggregate will be less. As to the internal revenue and customs duties—of the former the amount paid by each inhabitant of the United States in 1866 was \$8 80, and of the latter \$5 15, or a total per capita of \$13 95. According to the census of last year the population of this State was 3,831,777, and hence the total payments of the State to the United States government during that year was about 43 millions. Of course there is a larger amount than this credited to the State, but as the most of these payments ultimately come out of the consumer, the only correct mode of estimating the actual contribution is on the basis of population. The aggregate, therefore, of taxes, direct and indirect, paid by the people of New York in 1866 was about as follows :

State and school taxes.....	\$12,000,000
City, county and town taxes.....	50,000,000
Internal revenue and customs duties.....	53,000,000

Total taxes, direct and indirect, paid.....\$115,000,000

This it will be seen would be equivalent to about two per cent. of the valuation above given. It is hardly necessary to add anything further to show the ability of the State to meet its obligations promptly and easily.

MANUFACTURES, TARIFFS AND TAXATION.

Time fails to bring relief to our manufacturing industries. The depression which, for a time, was confined to one or two branches is now becoming general, and some anxiety is felt as to the result of the ordeal through which manufacturers are passing. We have repeatedly urged the importance of a limitation of production as the best means of bringing down the prices of labor and raw materials, and thereby enabling producers to meet the demand for goods at lower rates; but manufacturers appear to have regulated their production by the capacity of their works rather than by the capability of consumers; and the result has been that the supply of goods has been so far in advance of the demand as to place the determination of prices in the hands of buyers, causing upon many descriptions of goods very heavy losses. The current high prices of agricultural products, and the comparatively low prices of manufactures, suggests the conclusion that the war has left us with an undue proportion of the capital and labor of the country employed in manufactures, and an inadequate proportion engaged in the culture of the soil. Breadstuffs and animal food are essential to subsistence; and, though scarce and dear, they have had to be bought in about the usual quantity; but under such circumstances a large portion of the community are compelled to forego the supplying of other wants which contribute rather to comfort, luxury or adornment. This condition of things ought to have had its due weight with manufacturers, inducing them to produce with a moderation corresponding to the ability of consumers. They had, however, profited largely through a special demand for war purposes, and, without making due allowance for the cessation of this special consumption, have regarded the past consumption as the measure for the present.

This condition of things manufacturers have thought could be remedied by the adoption of a tariff largely excluding foreign manufactures from our markets. Repeatedly, the tariff has been changed to suit these views; but, in the face of duties intended to be prohibitory, the imports have largely increased and the value of domestic manufactures has steadily fallen. Yet notwithstanding the demonstrated futility of this expedient for keeping up the prices of goods, the manufacturers appear to have the same confidence in it as ever; for it is again proposed to apply to Congress for an increase of the duties on imports. At a recent meeting of the Manufacturers' Association of Detroit, the following resolution was adopted, and measures were taken for securing the co-operation of other kindred societies in holding a national convention of manufacturers at Cleveland, in December next:

Resolved, That the tariff on importations of foreign manufactures should be revised so as to well protect home industry against the unequal competition of the cheap capital and cheaper labor of foreign countries.

It is much to be regretted that it should be in contemplation to make any further demand of this character. With nothing to show in the way of beneficial results from repeated acts of protective legislation within the last five years, it is somewhat bold to ask Congress to repeat this fruit-

less experimenting again. Changes in tariffs are always embarrassing to business; and, in the present deranged condition of trade generally, some care should be taken not to add unnecessarily to the prevailing embarrassments. While the utmost possible consideration should be shown for such an important branch of our national interests, it must be remembered that measures cannot be adopted which must be detrimental to all others. Consumers generally and the non-protected interests have the same right to be protected against high prices as the manufacturers have to ask protection against foreign producers. Already, the duties on imports are very high; and there is no saying to what extent this may be carried if this periodical pressure upon Congress is to be in every case yielded to. Should an increase of customs duties again be awarded and the change prove as unavailing as other additions to the tariff within the last five years, what reason is there for supposing that Congress would not be asked to grant a still further increase of duties? We think, it is a fair representation of public sentiment on this question to affirm that the people have become tired of these perpetual petitions for relief and desire that the manufacturers should be left to feel that in future they must depend more upon their own prudent management and less upon Congressional aid. The result of a further increase of the tariff would be to encourage an increased production, tending to keep up high wages, and to prevent a due decline in raw materials, the radical error in management which has contributed very largely to the present depression of this interest.

There is, however, a relief which it is within the province of Congress to afford, and which may be granted upon the soundest principles and with advantage to the community at large. The taxes upon domestic manufactures are a serious burthen to our industries, and ought to be substituted by other and less embarrassing imposts. The duties amount to a heavy percentage upon the cost of the goods; and, by the charging of profit upon the consequent increased price, by each dealer through whose hands they may pass, involve a material increase of cost to the consumer. On some products, made from materials already taxed, the duty is exceedingly oppressive; and in not a few instances the assessing of the duties is accompanied with much inconvenience to the manufacturer, arising from disputes and delays; while, in all cases, the increase in the price of the goods tends to limit their consumption. There are large classes of goods which are consumed chiefly by the poorer classes, who have no choice but to reduce their purchases in proportion to the enhanced cost. In the production of some articles foreign materials have to be employed subject to a heavy import duty; and in such cases the taxation is duplicated, rendering it the more difficult for the manufacturer to compete with like foreign products. The duties on manufactures when first imposed, were only adopted as a ready measure for meeting the pressing exigencies of the war. They were defended upon the ground of necessity; but what was done upon reasons of temporary expediency has been allowed to pass without repeal, and can now be abrogated only by strong pressure. The country would support the manufacturers in an effort to secure the removal of this class of imposts, for the very practical reason that the result would be to cheapen goods, an argument just as important to the manufacturer as to the public

at large. On the contrary, no sympathy can be expected from the people in an attempt to gain a further advance in the tariff, for the reason that the professed object of such a measure is to enhance prices. A movement for the removal of the internal duties on manufactures has this great recommendation, that it coincides with the reactionary tendency of affairs toward lower prices, and that by cheapening products it so far facilitates that reduction in wages which is at present the great desideratum of our industries.

ON THE TARIFF AND THE PRINCIPLE OF TAXATION.

BY CHARLES H. CARROLL.

There is an argument against a tariff on imports that appears to have escaped the notice of thinkers and writers on public economy. It is that, regardless of the tariff or taxes of any sort, general prices conform to the volume of currency: so much currency makes or measures so much aggregate price for all the property and service seeking to be exchanged. Hence if one commodity employs, by reason of a tariff, more of the currency than it would employ without the tariff, some other commodity of equivalent natural value must employ so much the less, and yield in price accordingly; the low price of the unprotected article underpaying, as much as the high price of the protected article overpays, its producer in relation to its natural value.

Thus suppose the normal value, as determined by cost and supply and demand, *free of taxation*, be the same for 1,000,000 bushels of corn and 1,000,000 yards of cloth, the price being \$1 per bushel for corn and \$1 per yard for the cloth, and the Government then imposes an import duty of 25 per cent. on cloth. The effect will be to raise the price of the whole 1,000,000 yards of cloth, embracing both the foreign and domestic article, to \$1 25 per yard. Therefore, of the aggregate measure of \$2,000,000 for both commodities, the cloth presents a demand for \$1,250,000, and employs so much of the currency, leaving but \$750,000 for the corn, so that the corn falls to 75 cents per bushel, and the farmer as compared with the manufacturer is one fourth underpaid.

For the sake of simplicity I waive all consideration of the profit on the cloth duty to the jobber and retailer, which is so much additional tax paid by the consumer. By the "protection," whatever it amount to, the farmer is wronged, and doubly wronged; once in the abstraction of currency that should go to the price of his product, and again in the abnormal price that, as a consumer, he must pay for the cloth.

This distribution of the currency is an unavoidable result of the law of value in relation to money; for whatever may be the character or amount of the currency it can make only the same exchanges as a like sum of money, and it must, as the common instrument of exchange, follow the same channel of local circulation that would be occupied by a like volume of money—i. e., gold and silver.

The money of the world distributes itself among the nations according to the desirableness which constitutes the value of their respective prod-

ductions as objects of exchange, with no regard whatever to local taxation. It is attracted by low prices and repelled by high prices; anything tending to high prices drives it away.

A nation or a community cannot therefore increase its money by increasing its taxes or its expenses; it can do this only by increasing its capital, of which money forms a part, and it cannot *permanently* maintain a volume of mixed currency greater than its capital naturally demands of pure money for its instrument of circulation. Since, therefore, provision cannot be made for an increase of a nation's taxes by an increase of its money, or currency, the only way in which the currency can be provided to pay the additional price of an article unequally taxed is to take it from the price of some other article, and thus rob Peter to pay Paul. Were money capable of increase by tariff, or other taxation, industry and enterprise would lose their significance, and the accumulation of national wealth would be a mere matter of legislation, an idea that carries its refutation along with it.

It may not be possible to know the precise equivalents that are disturbed in their relations by a tariff, or by any other unequal tax. Of course there are many more bushels of corn than yards of cloth circulated and consumed in this country, and any reasonable estimate of the relative value of the corn and cloth that change hands in commerce is perhaps impossible. If 10,000,000 bushels of corn are equivalent in exchange value to 1,000,000 yards of cloth, then corn would lose but $2\frac{1}{2}$ cents per bushel of its normal price by a tariff of 25 cents per yard on cloth. All that I propose to show by the foregoing example is that equivalents in circulating capital are perturbed, and thrown out of their natural and mutually advantageous relations, precisely to the extent that the tax upon them is unequal, *ad valorem*. To that extent the abnormal is cherished and rewarded at the cost of the normal produce—to that extent a tax levied to favor the production of an article that would not be produced without it must be paid out of the proceeds of some other article not so favored, the production of which is natural to the soil and industry of the country.

The amount of duties on imports gives no sort of indication of the pressure of a protective tariff on the industry and earnings of the unprotected classes. The whole of the annual imports does not probably exceed one-twentieth part of the money value of the annual productions of the United States, leaving out of view the immaterial value or services that leave no enduring product capable of being exchanged, which are, equally with the material values, subjects of indirect taxation through duties on imports for the benefit of the privileged classes. Thus the pay of the clergyman, the teacher, the lawyer, the physician, the actor, &c., is so much the less by reason of the abstraction of currency to provide extra pay for the producer of that which could be imported for less than the cost of the home product. Hence the burden of taxation on imports is by no means confined to the consumers of the imports taxed, and of the special commodities protected. Were it possible for a consumer to avoid the use of every article the price of which is augmented by the tariff, he could not escape the insidious tax levied upon his industry by the abstraction of currency from his use to force a production against the natural law of value.

There are then two separate burdens imposed on consumers by a tariff on imports—first, the price added to both the taxed and the protected commodities, the latter being many times greater than the former, which sum is paid affirmatively by the consumers of the products immediately affected thereby; and second, the sum of currency abstracted from the normal remuneration of all other industries but those protected by the tariff, which sum is paid negatively but not less certainly by the unprotected classes.

There can be no objection to low and natural general prices, because, with a normal currency, they must be the consequence of activity of production, an increase of wealth, and abundance of capital in relation to currency—in other words, a high value of money, which increases the exports of merchandise; but there is an insurmountable objection to low and unnatural special prices, made so by abstracting currency from the use of one producer to give it to another through legislation, for this is but a form of robbery.

It is my opinion that the noticeable general disinclination to agricultural labor in this country is largely owing to the fact that it is the great unprotected branch of industry here. It is underpaid that other industries may be overpaid. Notwithstanding the co-operation of natural forces, working for nothing here with greater power than anywhere else on the globe, the farmer finds relatively small pay for hard work, and men are enticed away from this invigorating and naturally profitable employment, to seek ventures in crowded cities, and unwholesome work in manufacturing towns, to which the intermeddling of Government gives an unnatural incentive and reward at the cost of agriculture. The result is the production of commodities that could be produced cheaper in money value, and with more public advantage in the spread of population, in the more extensive cultivation of the soil, the greater vigor, the better health, and the more general intelligence and happiness of the people, by a normal application of their industry, on the land and on the water, through the exchanges of an unshackled commerce.

It is no argument against this to say that the nation thrives. However it may check its thriving the task would be difficult for Government to prevent it. Such are the vast resources of the country in cheap and rich lands and inexhaustible mines—as the London *Economist* says, “the best things on the earth and under the earth”—accessible by many thousand miles of free navigation of rivers and lakes, a varied climate, favoring the production of almost everything that agriculture can furnish desirable to man, with ship timber, naval stores, forests of exportable lumber for house-building, numerous and secure harbors on an extended ocean coast; in short, all the most beneficent powers and capabilities of nature attracting immigration and co-operating with a high degree of intelligence, industry, and enterprise, among the laboring classes, what but madness on the part of the Government can prevent the advance of the nation in material prosperity! Yet nature triumphs over an adverse legislation at a vast and needless cost to individuals of wealth and peace of mind. Nowhere else under the sun is bankruptcy in trade so general, success in life so various and uncertain, and anxiety in families, and unhappiness in society on the whole, so great. We prosper in spite of the Government, which

is only tolerable so far as it maintains order and justice; this is its only legitimate function. When it attempts didactic legislation—when it attempts to teach the people what branches of honest industry they shall or shall not pursue, it is positive and insupportable evil.

The foregoing considerations lead, of course, to the conclusion that all taxes should be direct and level, *ad valorem*. They should be levied on all property alike, and on all income alike, with the exception of a certain necessary standard of living, which Government should be careful not to impair, since the ambition of the industrious classes depends largely upon it. Their enterprise and application to labor is affected by it to a degree that has a wide influence on the material and moral welfare of the nation. The higher that standard is fixed by custom and public opinion the fewer persons will be satisfied with a low and grovelling existence, and the greater is, necessarily, the public prosperity.

As self government is the ultimate aim of political science, any other is but a necessary evil to be endured only while and to the extent that the moral and intellectual forces of society are too weak to control the dangerous, and protect the suffering classes without the aid of public authority. Teaching is better than legislating for the public good. No good man needs an exciseman or a constable to tell him what to buy, or sell, or eat, or drink, or wear, or how to perform his part in life, and the hand of authority is badly employed when it tends to depress the ambition or check the honest industry of any one.

The theory which looks to Government as a teacher or a director is, to my apprehension, altogether a mistake; Government is formed, or ought to be, not to teach the people but to be taught by them; its authority is limited by their average intelligence and sense of justice, and when it attempts to extend its power beyond this limit, as, for instance, in the support of the institution of slavery in this country, it is sure to be resisted until the iniquity is destroyed. The tariff system of taxation, which stands at the mouths of our harbors to drive away our customers and cripple the commerce and industry of the country, is another of these iniquities that the intelligence and true democracy of the nation have marked for speedy destruction.

Levy and level the taxes *ad valorem* and they will not affect prices in the slightest degree; both the domestic and international exchanges will be made at prices the same precisely as if there were no taxes at all. This is obvious from the proposition with which we started, the correctness of which no thinker will dispute, that general prices conform to the volume of currency and its relation to circulating capital. Double the currency, or reduce the circulating capital one-half: either will depreciate the value of money or currency one-half in a rise of 100 per cent. of general prices. Reduce the currency one-half, or double the circulating capital; either will appreciate the value of money or currency 100 per cent. in a fall of 50 per cent. of general prices.

People do not consider as they should—and legislators are culpably neglectful of the economical fact—that *payment* is made in *value*, not in *price*. Suppose a farmer to have 100 bushels of wheat on which he is taxed one per cent., then one bushel goes to pay the Government, and ninety-nine to satisfy other demands. But suppose the tax to be five per

cent., then five bushels go to satisfy the Government, and ninety-five to other demands. It requires no more money or currency to make the one distribution than the other. There are but 100 bushels of the wheat to command currency or value in exchange; there is but so much capital as is contained in this quantity of wheat, only so much *value* to make payment so to be employed or consumed in peace or war, and it is pure folly to suppose that its efficacy or value can be increased by multiplying dollars and increasing its price. The same is obviously true of every item of capital and of the capital of the country altogether.

Had this simple economical fact been comprehended by Government at the commencement of the rebellion, that capital and not currency—value and not price—makes payment, the folly of increasing the currency would have been avoided, and what a wonderful difference it would have made in the amount of taxation and of the national debt, as well as in the condition of the commerce of the country!

Value, it should be understood, is that power in exchange which commands the necessities, conveniences, and luxuries of life, while *price* commands nothing but currency, which may be money, or bank or Government debt, or overvalued tokens, the value of which is what it will fetch; and the laborer with three dollars of price will have no more or better payment for his day of service, when the currency is expanded threefold by debt, than with one dollar of money at its natural value, because the three dollars are by the expansion depreciated to the value of one dollar. In fact, under this supposition, two of these dollars are fiction; they never had any value, and can impart none; they make price without value. What the dollar buys is the laborer's payment or remuneration, not what the dollar is, or rather what it is not by reason of a trick of banking or of an issue or a legal tender act of Government.

As to the apology of war for the present high tariff and other unequal taxation, however honestly presented or accepted, it is very absurd as a scientific fact. The argument just presented shows that inequality of taxation is as unnecessary for war as for peace. The capital of the nation supplies the consumption of the nation, and all that is necessary for the support of Government, in war or peace, is an equal distribution of its cost among the people according to their means of payment. An astonishing delusion prevails upon this subject, especially with reference to the necessity of a public debt, and also as to the effect of war on the material prosperity of a country. Its moral and immediately personal effects we are not now considering. Its atrocities, and bereavements, and mutilations, and physical suffering, are shocking enough. No knowledge of science is needed to comprehend the moral evils of war and deprecate its horrors, but scientific knowledge is necessary to comprehend that a just war, equitably maintained, is not necessarily unprofitable, in a material sense, to the nation at large.

No capital but our own paid for the war of the rebellion; none was borrowed from abroad at the time, and none was needed; for we had ample capital to have maintained two such wars, *without a public debt*, and in continual prosperity as much as in peace, and we have no less capital now. Every dime of the cost of the war was paid for out of the national capital at once, as fast as the capital was delivered to the Govern-

ment for the purpose; and the energies of consumption it developed stimulated in like degree the vast energies of production in which, with special reference to the commodities most needed in war, no nation on the globe is more powerful than the United States.

So long as the capital of each producer is promptly replaced, that is to say, his present capital, which includes of course his invested capital and profits, the more consumption of his products, and the quicker the better, because the greater will be the employment of industry and the opportunities of saving, and the greater the national wealth. People argue on this subject as if capital were not consumed in peace. How long is it profitable to the producer of a finished article, or to the commerce of the country, to keep it unsold or unconsumed? Clearly until a buyer is ready to replace the capital it contains, and not a moment longer. It is only at the seat of war, where the means of reproduction are destroyed, that war, in the material or financial point of view, is necessarily unprofitable. Napoleon was careful to remove this from France—to fight on other soil than his own; so far he was a good political economist, and France never prospered more in wealth and population than during his wars against all the rest of Europe. Mankind people up to the means of maintenance, especially to the supply of food, and where these are steadily increasing population increases in like proportion, whether in war or peace.

No doubt the revolted States lost capital by the rebellion, since they used up and suffered the loss to a great extent of their means of reproduction; but the vast productive powers of the West and North were so stimulated at the same time that they have been enriched more than the South has been impoverished, and the national wealth, reckoning the negroes, before and since, as they always were, labor and not capital, is to my apprehension no less to-day, in the aggregate, than it would have been without the war.

I have not space in this article to discuss more fully the point of the relation of war to public wealth, and I offer these remarks upon it merely to give the reader assurance that a tariff or unequal taxation was not necessary for the conduct of the war that is just closed. I have acted with the Republican party in support of the fundamental Democratic principle of human freedom, but with a continual protest against their financial policy; and I maintain that the present abnormal condition of the national finances is owing not necessarily to the war, but to an unequal and unjust distribution of its burdens, and to an unpardonable ignorance of the nature of money and of the fundamental principles of economical science.

Instead of taxing the rich and the bank stockholders for their share of the cost of the war, Government has borrowed capital of the former, and granted to the latter the privilege of kiting, against public and private debt, a currency consisting of bank notes and book credits, miscalled "deposits," on which the people are obliged, from the necessity of the case, to lend their capital for nothing and pay interest on it besides, not for the benefit of the Government or of themselves, but for the benefit of the currency makers. These two classes, therefore, instead of being, like the rest of the people, payers of taxes, are made receivers of taxes, and the burden of supporting the war and a needless public debt has been thrown upon the poorer and the hard-working classes, who are the least able to

bear it. Of course this cripples their means of consumption, and, as they are the great consumers, their forced abstinence reacts upon production, crippling that and necessarily the general trade of the country. As a nation we are in the absurd and paradoxical position of having paid for the war to the last dime out of our own capital and at the same time we are owing for a great portion of it to certain of our own citizens, because we have neglected to collect from them their share of its cost. Such is the preposterous nature of the funding system.

RAILROAD EARNINGS FOR OCTOBER.

The gross earnings of the under-mentioned railroads for the month of October, 1866 and 1867, comparatively, and the difference (increase or decrease) between the two periods, are exhibited in the following statement:

Railroads.	1866.	1867.	Increase.	Decrease.
Atlantic and Great Western.....	\$541,491	\$477,533	\$.....	\$63,958
Chicago and Alton.....	880,833	450,108	69,785	.....
Chicago and Great Eastern.....	126,996	143,605	16,609	.....
Chicago and Northwestern.....	1,300,316	1,508,853	308,667	.....
Chicago, Rock Island and Pacific.....	422,123	558,200	136,077	.....
Erie.....	1,476,844	1,498,716	22,472	.....
Illinois Central.....	661,971	761,499	99,528	.....
Marletta and Cincinnati.....	112,604	142,822	29,319	.....
Michigan Central.....	493,649	506,295	12,646	.....
Michigan Southern.....	496,655	539,435	42,780	.....
Milwaukee and Prairie du Chien.....	833,735	1,101,800	267,865	.....
Milwaukee and St. Paul.....				
Iowa and Minnesota Division.....	810,763	879,387	68,625	.....
Ohio and Mississippi.....	757,441	765,568	8,029	.....
Pittsburg, Fort Wayne and Chicago.....	438,035	406,786	.....	29,299
Toledo, Wabash and Western.....	100,308	119,697	19,384	.....
Western Union.....	.....	.....	.....	.....
Total in October.....	\$3,331,478	\$9,346,057	\$1,019,446	\$.....
Total in September.....	7,178,435	8,443,865	1,270,430	.....
Total in August.....	6,619,650	6,973,228	253,578	.....
Total in July.....	5,967,856	5,754,795	.....	\$12,061
Total in June.....	6,706,446	5,816,741	.....	890,705
Total in May.....	6,402,287	5,907,650	.....	494,637
Total in April.....	5,473,197	5,812,788	339,611	.....
Total in March.....	5,593,523	5,639,601	46,078	.....
Total in February.....	4,664,535	4,798,978	134,453	.....
Total in January.....	5,373,441	5,413,437	34,996	.....
January—October, 10 months.....	\$63,315,768	\$63,875,900	\$1,560,132	\$.....
“ “ average.....	6,331,576	6,387,590	156,013	.....

By reason of the refusal of the St. Paul Company to furnish us the October earnings of their several lines separately, we have been compelled to give the earnings of the Wisconsin lines (usually reported by us in our monthly summary) and those of the line in Iowa and Minnesota (135 miles) as a whole. This somewhat deranges our tables, as the October mileage is so much larger than the mileage of the previous months of the year, and cannot be compared with those months in gross. The discrepancy, however, disappears in the subjoined table which shows the miles of railroad operated and the gross earnings per mile for the cor.

responding month of the two years 1866 and 1867, as deduced from the figures of the preceding statement :

Railroads.	Miles		Earnings		Difference	
	1866.	1867.	1866.	1867.	Incr.	Dec.
Atlantic & Great Western,	507	507	\$1,068	\$943	...	\$125
Chicago and Alton,	280	280	1,267	1,536	269	...
Chicago and Great Eastern,	224	224	567	641	74	...
Chicago and Northwestern,	1,023	1,145	1,168	1,327	159	...
Chicago, Rock Island & Pacific,	410	430	1,039	1,261	222	...
Erie,	798	775	1,850	1,894	44	...
Illinois Central,	708	708	935	1,078	143	...
Marietta and Cincinnati,	251	251	453	559	117	...
Michigan Central,	255	255	1,732	1,777	45	...
Michigan Southern,	534	534	948	1,029	81	...
Milwaukee & Prairiedu Chien, 285,	740	740	1,127	1,335	208	...
Milwaukee and St. Paul, 370,						
Iowa & Minnesota Division, 135,						
Ohio and Mississippi,						
Pittsburg, Ft. Wayne and Chicago,	340	340	914	1,116	202	...
Toledo, Wabash and Western,	463	468	1,618	1,636	17	...
Western Union,	531	531	587	781	...	194
.....	177	177	567	678	110	...
Total in October,	7,365	7,365	\$1,147	\$1,270	\$122	\$...
Total in September,	7,130	7,230	1,007	1,170	63	...
Total in August,			986	966	20	...
Total in July,			327	797	...	470
Total in June,			941	806	...	135
Total in May,			896	818	...	78
Total in April,			768	806	37	...
Total in March,			725	781	56	...
Total in February,			654	664	10	...
Total in January,			754	749	...	5
January-October: 10 months,	7,144	7,224	\$3,723	\$3,880	\$157	...
..... average,			372.20	388.00	10.70	...

From these deductions it is very apparent that the increase shown in August and September has been continued on an enlarged scale in October. As compared with the earnings of the corresponding months of 1866, those of 1867 were in excess—in August \$38 per mile, or 4.09 per cent.; in September \$63 per mile, or 6.25 per cent., and in October \$122 per mile, or 10.72 per cent. The highest (October) of the year, and the lowest (February) compare together, and with the monthly average as follows :

	Earnings p mile.		Inc. in 1867.	
	1866.	1867.	Absolute.	Per ct.
October,	\$1,147	\$1,270	\$123	10.72
February,	654	664	10	1.51
Average,	572	632	11	1.92
October, above February,	493	606	113	22.92
..... average,	376	487	111	27.09

These figures certainly show that October, 1867, has been an extraordinarily prosperous month; indeed, the most prosperous as yet in the annals of American railroading. As indicating the commercial movement it assures us that the country generally is in a high state of activity, although in some branches of industry there may be a lack of vitality. The movement of the grain crops has, no doubt, contributed most largely to the sum total earned; but there is also a westward movement which will probably grow heavier as the season advances, and the grain excitement subsides, the Western consumers of merchandise having made sufficient money from the sale of their produce to warrant a liberal expenditure in the seaboard cities and manufacturing districts.

THE GOLD MOVEMENT SINCE 1860.

To a country, with a depreciated paper currency, and desirous of an early return to a specie basis, it is a matter of no small consequence to ascertain what is its supply of the precious metals. *A priori*, it might be considered highly probable that during the last six years we should have parted with a considerable portion of our accumulation of gold. Our production of commodities was materially curtailed by the war; and the consequent advance in prices (beyond what was due to currency derangements) naturally opened our market to the products of foreign countries. We were deprived of the principal staple by which we have been wont to pay for our imports, and had not the usual supply of breadstuffs for exportation. With such a radical derangement in our foreign commerce, it would seem very natural to conclude that we should have to draw largely upon our accumulation of specie for liquidating the excess of imports over exports. A very general impression exists among our people that such has been the actual course of affairs, that we have thus lost a large amount of specie since 1860, and that consequently we have not at present an adequate basis for the resumption of specie payments, and cannot have until, by some legislative expedient, the efflux of specie from the country is checked.

The principal movements of the precious metals in the country are indicated in recorded returns, with sufficient precision to enable us to form a reliable estimate of the correctness of this opinion. The imports and exports of coin and bullion are officially recorded. The product in California, Arizona, Idaho and Oregon is represented by the registered receipts at San Francisco by Wells, Fargo & Co.; but to the recorded arrivals by that medium it is customary to add 10 per cent. to the receipts from the interior and 30 per cent. to the coastwise receipts for amounts brought personally by miners; and in giving below the product received at San Francisco we make that addition. Of the product in the new mining regions of Colorado and Montana there is no actual record. The yield in those districts is sent direct to the Atlantic; and during the last two years a considerable portion of the yield of Idaho also has taken this route. It is difficult to estimate the amount of treasure coming overland from these regions. During the last three years the product of Colorado and Montana has been quite important. The amount of gold from those territories, deposited at the mint and its branches, last year was \$6,523,000; and yet it is known that of the whole product less than one half finds its way to the mint. It is estimated by those most familiar with the treasure movement of these regions that the annual product is about \$15,000,000. Deeming this estimate somewhat sanguine, it may yet be very safely estimated that the receipts from Colorado, Montana and other mining districts at other points than San Francisco, since 1860, aggregate fully \$50,000,000, and this we adopt as an estimate safe beyond all dispute.

With these explanations we subjoin a statement of the domestic production, the imports and the exports for each of the last seven years;

the home yield being for the calendar year, ending December 31st, and the imports and ex-ports for the fiscal year ending June 30th :

IMPORTS.

1861.....	\$46,800,000
1862.....	16,400,000
1863.....	9,500,000
1864.....	12,100,000
1865.....	7,300,000
1866.....	10,700,000
1867.....	22,200,000
Total imports, 7 years.....	\$125,000,000

DOMESTIC PRODUCTION—PRODUCT RECEIVED AT SAN FRANCISCO.

1861.....	\$48,100,000
1862.....	64,500,000
1863.....	58,900,000
1864.....	61,800,000
1865.....	58,900,000
1866.....	67,000,000
1867 (partly estimated).....	60,000,000
Total receipts at San Francisco.....	\$402,600,000
Estimated total receipts at other points, 7 years.....	50,000,000
Total domestic production, 7 years.....	\$452,600,000

EXPORTS.

1861.....	\$39,100,000
1862.....	36,800,000
1863.....	64,100,000
1864.....	69,800,000
1865.....	54,800,000
1866.....	66,000,000
1867.....	55,100,000
Total exports, 7 years.....	\$328,700,000

RECAPITULATION.

Imports for seven years.....	\$125,000,000
Domestic production for seven years.....	452,600,000
Total supply for seven years.....	\$577,600,000
Exports for seven years.....	328,700,000
Gain in supply for seven years.....	\$188,900,000

It thus appears that, within the last seven years, our supply of gold has exceeded our importations by \$184,000,000. We must acknowledge considerable surprise at this result, but can conceive of noway in which its substantial accuracy can be impugned. There are considerations which justify the expectation that the precious metals would have accumulated during the period under review. Our gross exportation of coin and bullion, during the last seven years, has been almost exactly the same as for the preceding seven years; the shipments being for the respective periods \$393,700,000 and \$395,500,000; but we have received from foreign countries, during the seven years since 1860, \$125,000,000, while during the preceding seven years we imported only \$62,500,000. It thus appears that, since 1860, our net exports have been \$64,300,000 below the amount for the like number of years next

previous. Concurrently with this decline in the ratio of our net exports, we have had an increase in the domestic production. As the record of receipts at San Francisco was not kept with much precision previous to 1860, we cannot compare the movement since that year with that of the preceding seven years with strict accuracy. From a comparison of estimates, we take it to be quite safe to conclude that the receipts at that point for the last seven years average fully \$5,000,000 per annum in excess of those for the seven years ending with 1860. The overland receipts at the Atlantic ports from the new gold fields, which we have estimated at \$50,000,000 for the seven years, also form an important item in accounting for the large increase of supply. Putting together these several items—the decrease in net exports, the enlarged receipts at San Francisco, and the product of the new mines arriving at other points—we are enabled, from these considerations alone, to account for \$150,000,000 of the \$184,000,000 gain above exhibited.

The taxation upon the assays of bullion afford an important criterion of the current production of the precious metals in the country. It is to be assumed that in this, as in other departments of taxation, a portion of the duty (upon private assays) fails of being reported to the revenue officers; so that the official returns cannot be taken as representing fully the production. It appears, however, from the last Report on the Finances, p. 266, that, for the fiscal year 1866, \$488,337 of tax was collected upon assays of \$81,389,541 of bullion. Allowing for a certain amount assayed without paying the tax, it is scarcely supposable that the product of that year was less than \$85,000,000, which is \$9,000,000 in excess of the net exports of the year (a year of much the largest specie shipments in the history of the country), and \$47,000,000 in excess of the average net exports for the last seven years. This fact shows that we are producing the precious metals at a rate vastly in excess of our exportation, and taken together, with other considerations previously adduced, confirms the credibility of the result to which the above statistics have led us.

These facts show that so far from the supply of gold having been lessened during the war, it has been largely increased. It cannot, therefore, be urged against the resumption of specie payments that we have not an adequate metallic basis. Precisely where, or in what condition, this large amount of the precious metals is held it is not pertinent to our present purpose to enquire. The proof is incontestable that it is in the country; and it is reasonable to suppose that upon gold being again brought into regular use, a considerable portion of this increased stock would find its way into circulation, so as to supply the monetary wants of the country.

OUR RAILROAD SYSTEM.*

BY THE HON. JOSIAH QUINCY, OF BOSTON.

The most superficial observer cannot fail to be struck with the extent of our railroads, with the excellence of much of their engineering, and with the vast motive power they are able to employ. Tunnels have been bored through mountains, viaducts carried over valleys, and the treacherous swamp has become firm set earth beneath the iron highway. With a double track any line of railway offers an almost unlimited capacity for the transportation of passengers and freight. No amount of traffic could well be offered, no concourse of passengers could well assemble, that a properly managed railroad could not accommodate. Why, then, are the trains comparatively empty and infrequent? The trader wishes to give his personal attention to the selection of his goods. The mechanic and laborer wish to go where labor is abundant and to return as soon as it is dull. The New Englander would like to go West and see what it is that feeds him, and send home from full granaries the supply for his family or town. The citizen of the West would like to go to New England and see who it is that clothes him, and, leaving his orders, receive many bales of clothing adapted to his market. The citizen of South Carolina would like to come to the North and learn how little animosity of feeling has survived the war. The enterprising young man in New York, fighting his way up from poverty, wanted to visit the South, to cultivate friendly relations and cultivate the chances of profitable trade. Intimate intercourse and easy mingling of the different sections of the nation is the true means for a permanent and sound reconstruction of the Union. The price of bread on the sea-board, the value of land in the West, the payment of our indebtedness to foreign nations in our own products, all call upon our railroads for reduced freights and reduced passage. To effect this, great arteries of trade and traffic must be controlled by the people for the people.

A paralyzing monopoly is exemplified in our present railway system and it is a monopoly that no increase in the number of railways can affect. Patentees and authors have a mild form of monopoly for a limited time. For a few years they are enabled to charge a high price for their inventions or books. Observe how these monopolies differ from a railway monopoly. Their time is limited and their sphere of operation contracted. In a few years the most important invention can be used by the public without any restriction, and until that time comes, if the price is too high, no one is compelled to use it. But how different is the case with railroads? The public must use them and pay the monopolists' price, not for a limited time, but for ever, if our present system is permitted to be permanent. For the State has authorized the directors of a railroad to conduct its business as may best conduce to their own ease and the interest of the shareholders. And so these directors may say to the public, "You have no complaint to make. You may travel about the country

* Read before the American Social Science Association, November 22, 1897.

in any other way you please. If you choose to try it, you had better take food for yourself and forage for your animal, and conveniences for camping out, for our railroads have destroyed all wayside inns and annihilated all rival lines of stages. Or, if you have a few superfluous millions, and can get a new charter through the Legislature, you may put down a new track by our side, when we will either buy you out or agree upon a common tariff and let the people pay tribute to two railroads instead of one!"

Seeing then how completely we are in the power of railway managers, it is interesting to learn the actual cost of the transportation we are compelled to accept. At what cost per mile can a ton of freight be carried on a railway?

There is a prevalent opinion that the charges must be proportioned to the cost of construction—that when the cost is heavy the charges must be proportionably great. Now the English railways on which the greatest amount of capital per mile has been expended are precisely those on which the fares are lowest. The Charing Cross Railway, for instance, cost a million and a half sterling, or seven million five hundred thousand dollars in gold per mile; and yet passengers are carried at a lower rate than on some railways that were constructed at a hundredth part of that cost. The error arises from confounding the cost of the machinery by which the passengers are conveyed with the cost of the conveyance itself—when the fares exceed the actual expense incurred in conveyance, it becomes a mere question of numbers as to what fares best pay.

A pound of coke under a locomotive boiler will evaporate five pints of water; in this evaporation a mechanical force is developed sufficient to draw two tons' weight on a railway a distance of one mile in two minutes! The same weight in a stage-coach on a common road would require four horses, and occupy six minutes. Dr. Lardner says: "To transport a train with 240 passengers from London to Birmingham and back, 200 miles each way, in three hours and a half, is effected by a mechanical force produced by the combustion of five tons of coke, the value of about £5. To carry the same number by stage-coaches would require twenty coaches and 380 horses, and would be performed in twelve hours. The anomaly is, that while the cost is reduced to less than one-twentieth, the fares have, on an average, not been reduced one-half."

In pursuing this inquiry, I regret to be compelled to rely so much on English authorities. But the managers of our American railroads seem to object to our getting at statistics. The president of a principal one confessed before a legislative committee that they only divided their expenses in their report to the Legislature, which was made up arbitrarily, as best they could. But in England their returns are more exact.

The following estimates of the English Board of Trade are made upon the principle that the ordinary current expenses of the establishment are paid, the railway kept in state of efficient repair by the substitution of new rails and sleepers for old ones, and all other work of a similar kind which may be necessary, such as keeping the rolling stock, engines, wagons, carriages, and tracks in order, replacing them by new ones when necessary. All this outlay is comprised in working expenses.

The average expenditure per train per mile, taking all the railways in the United Kingdom, has, according to the reports of the Board of Trade

for the year 1883, been 2s. 7d. (62 cents). The different items which go to form the whole are from the data furnished by the companies and reproduced by the Board of Trade.

It is to be observed that this average expenditure per train per mile includes goods, coal, and other mineral trains, conveying two or three hundred tons each, as well as passengers.

AVERAGE COST OF CONVEYING A TRAIN A MILE.

	s.	d.	cts.
Maintenance of Way and Works.....	0	1½	11
Locomotive Power.....	0	9	18
Repairs and Renewal of Carriages and Wagons.....	0	2½	5
General Traffic Charges.....	0	9	18
Rates and Taxes 1½d., Government Duty 1d.....	0	2½	5
Compensation for Personal Injury and Loss of Goods....	0	0½	1
Legal and Parliamentary Expenses.....	0	0½	1
Miscellaneous Working Expenses not included in the above.....	0	2	4
	<hr/>		
	2 7 or 63		

The first three items, amounting to 1s. 4½d., or 33c., are direct. They are the actual expenses incurred in the conveyance of each train. The others, amounting to 1s. 2½d., or 29c., embrace the general expenditure of the establishments, which must be paid, whether the trains run or not.

Again, a contest took place between the London and Northwestern and the Great Northern Companies. The fares for passengers were, for the first class, each one hundred miles one shilling (24 cents) and ninepence (18 cents), or less than a farthing (half a cent) a mile; and for second class, in carriages, comfortably cushioned, one shilling and two pence, or a penny for seven miles. These trains carried on an average six hundred passengers; two hundred first and four hundred second class, the fares for the double trip amounting in all to one hundred and seventy-five pounds. The cost per train per mile was two shillings and seven pence, taking the double distance of four hundred miles. The whole expense of the train, both the direct expense and the proportionate expense of the management, comes to fifty guineas, and the receipts, as we have seen, to one hundred and seventy-four pounds, leaving a profit of nearly two hundred and fifty per cent. on the conveyance of passengers by each train. The loss was calculated to be one-half per cent. on their dividends.

A similar contest took place between the Southeastern Railroad and the Great Western for the London and Reading traffic, which lasted about a year and a half. Passengers were carried, per hundred miles, first class at the rate of two shillings and three pence (54 cents), second class one shilling and six pence (35 cents).

In this case the chairman stated that the Company lost nothing by the change in fares; they paid the same dividends, and were well satisfied to go on. Yet these roads were charging on one part of their lines ten times as much as on the other parts, and on those parts where they were carrying lowest their profits amounted to about 250 per cent. in the cost of conveyance of each train.

The Edinburgh and Glasgow and the Caledonian Companies, in consequence of a dispute, reduced their fares to about one-eighth of the ordinary charges, from 8, 6, and 4 shillings to 1s., 9d., and 6d.

The Edinburgh paid one per cent. per annum less to their shareholders; and the loss to the Caledonian was calculated at something less than one-half per cent. on theirs. These fares were by all trains. The charge per hundred miles was, first class 2s., 3d. (54 cents), second 1s. 9d. (42 cents), third 1s. 2d. (28 cents).

If we put into a tabular form the original fares, the reduced fares and the loss of profits incurred by the reduction of the dividends will show thus:

ORIGINAL FARES, RETURN TICKETS.

	\$ c.	\$ c.	\$ c.	Miles.
London and Northwestern.....	14 40	9 60	—	380
Great Northern.....	14 40	9 60	—	410
Southeastern.....	2 40	1 80	—	134
Edinburgh and Glasgow.....	1 92	1 44	96	46
Caledonian.....	1 92	1 44	96	55

REDUCED FARES, RETURN TICKETS.

	\$ c.	\$ c.	\$ c.	Loss in Div.	Per cent. per ann.
London and Northwestern.....	1 80	1 20	—	2 40	$\frac{1}{4}$
Great Northern.....	1 80	1 20	—	2 40	$\frac{1}{4}$
Southeastern.....	72	48	—	—	—
Edinburgh and Glasgow.....	24	18	12	4 80	1
Caledonian.....	24	18	12	2 40	—

We have now before us the results, in a financial point of view, of very high, moderate, low, and extremely low, prices; and we find that it makes comparatively but very little difference in the annual dividends, not exceeding in any case one per cent., whether they charge one farthing a mile for first-class passengers, or fourteen farthings—the two extremes; and the others are in the same proportion. It however happens, that although the difference in profit is not great, fourteen farthings would invariably pay better than one; and as the companies have no legal obligation to consider anything but their own interest, and, as it would increase the labor of their manager, they would adopt the fourteen if they have no other choice. The monopolist, having no fear of competition, has only to consider what rate pays him best, and adopt that rate accordingly.

Thus far for passengers. When used only for freight the results are equally striking.

Mr. Galt says: "What could be more interesting to the public than to hear the chairman of the Northwestern Railroad inform his shareholders that the cost of coal at the pit's mouth was 8s., and the carriage to London being so much a ton, they could deliver it at such a price, which would leave a good profit. Now, the chairman never give these details, but seem totally unable to comprehend any question put for the purpose of eliciting such information. There are secrets in every trade, and railway directors naturally wish to keep all information from the public that might raise a popular outcry against them. What is patent is the enormous loss the nation sustains, so long as the present system continues."

"We have, however," he adds, "one case, and one case only, on record, in which the chairman of a railway company entered fully into the matter, giving the most minute details of expenditure; thereby showing the actual

cost of conveyance of coal, per ton, to the metropolis, and incidentally to any other place. An outcry was made by the shareholders of the Eastern Counties Railway against their chairman for carrying coal at rates that did not pay. In answer to the charges he gave the following minute detail of expenditure signed by the traffic manager :

Mr. Gooch's report: "This traffic is worked in full trains. Each train contains not less thirty wagons, at $6\frac{1}{2}$ tons each, 190 tons net load ; for which the sum paid by the contractor is 8s. 7d. per mile, or about a half-penny per ton. The cost to the company is as follows :

1st. Locomotive power.....	9.68d.
2d. Guards.....	60
3d. Green lamps and oil.....	1.70
4th. Permanent way.....	1.00
5th. Management and office expenses.....	1 00

Total cost per mile per train of working expenses..... 12.18

But as these trains return empty, only earning money in one direction, this account must be doubled ; and would give a total sum two shillings two pence farthing, or 53 cents, to earn 8s. 7d., or showing a profit of nearly 300 per cent. As the contractors found the wagons, which might be calculated at $8\frac{1}{2}$ d. a mile, the entire expenditure would be brought up to 2s. 6d., or 60 cents, for the double journey. The cost, therefore, for conveying each ton of coal is 1s. 4d., or 32 cents, for a hundred miles."

I cannot conclude without a further quotation from Mr. Galt, who says :

"The policy hitherto acted upon by railway directors, and, considering them as traders, not an unfair one, has been to keep the public in complete ignorance of the internal working of our railway system, so far as regards the extremely low rate at which passengers and goods can be conveyed on railways." But an ingenious chairman might say : "The fact is that we and all other companies can carry passengers at exceeding low rates. A first-class passenger we can carry four miles for a farthing (one half of a cent), a second-class six miles for a farthing, and a third-class ten miles for a farthing, and all beyond that, with fairly loaded trains, is profit. When the public come to know that a passenger can be conveyed one hundred miles for two pence halfpenny (or five cents), for which he is charged eight shillings and four pence (or two dollars), and that a ton of coal can be brought from the north of England for about a shilling (24 cents), the cost being there six or seven shillings, and the price in London four or five times that sum, it requires no prophet to foretell that the days of railway monopoly, in private hands, will in this country (England) soon be numbered." But however great may be the benefits accruing to the people from the low fare system, they are unattainable under the present mode of management. The presidents of these roads would not be justified in trying experiments, or in sacrificing one per cent. on the dividends of their shareholders."

There is one point to which I would call particular attention. The amount annually paid for freight far exceeds that paid for passage. The latter is paid by the thousands who travel, the former by the millions who

stay at home. Complaints are often made of the exorbitance of the former, very seldom of the latter. The one is a direct tax levied on the travelling, the latter an indirect tax levied on the whole community. The merchant makes no complaint, for the consumer pays it. The consumer makes no complaint, for he is not aware how much of the price he pays goes to transportation. He does not know that with the full freights the railway might command, prices could in many cases be reduced one-half. He does not realize that the monopolist has no reason for increasing the amount of freight, as the high price he receives makes it a matter of small account to him whether the load is heavy or light. Let us take an example. Coal at the pit's mouth in Pennsylvania is worth about a dollar and a half a ton. Let us take the English price of thirty-two cents a ton for a hundred miles, and a third for depreciated currency, making about forty-three cents a ton.

The distance to Philadelphia is about three hundred miles; a citizen buys ten tons and pays cost and freightage, which, together, amounts to about \$2 70 a ton or \$27 90 for the lot. While he is congratulating himself on the reduction, a railroad employee enters and says the market price of the coal is eight dollars; we have been obliged to send in the first bill at cost, and now present one for the profits, which amount to five dollars and twenty-one cents a ton. Fifty-two dollars and ten cents for the difference! If the profits should be stated in this way, even a Philadelphia Quaker would be justified in saying, "Verily, friend, thy profit is exorbitant."

Now I have no complaint to make of shareholders in our railroads. In many cases it is known that they receive a moderate interest on their investment. But it is not patent how enormous is the loss sustained by the nation while the present system continues. Let us take the case of coal in England. Mr. Galt says: "We can buy it at the pit's mouth, and transport it to the metropolis for seven or eight shillings per ton; but as a general rule we pay four times that price in London. The price the poor pay for the small quantity they are able to purchase at a time during a severe winter, the extent to which they are cheated, and the sufferings they in consequence endure, are matters every one is well acquainted with. Monopoly charges them three or four hundred per cent. in ordinary times, and in extraordinary as much as it can lay on." Let the people make the calculation—take the English cost of 32 cents a ton a hundred miles and add what you please for America—and see if they do not find that the companies are authorized to, and do charge that sum many times over, and that the public have not the slightest power or control in regulating these charges.

Let us take again the tariff charged by expressmen for parcels and packages. What a blessing it would be to hundreds of families in the city and the country if they could procure, at a moderate charge, the produce from various parts. The Post-office carries small parcels by the railway in many cases for less by one-fourth than they can be carried by the express on the same train. I can send by the Post-office, to any part of the United States, a package weighing four pounds, and have it delivered with my letters at a charge far below the express tariff. In the one case it is done by a *State monopoly* which is under strict control and directed only

for the public good. In the other it is done by a *private monopoly* guided by private interest and charging whatever it pleases. At the present rates the charges for small parcels of little value are prohibitory. Distance make but little difference in cost, as the expense of collecting and delivering is the same whether the article is conveyed twenty or two hundred miles, and if a ton of goods can be conveyed two hundred miles for thirty-two cents the cost of transporting small articles is hardly appreciable.

The papers are full of the glories of consolidated lines with \$150,000,000 of capital—and of the great convenience of expresses and sleeping palaces, and red, white and blue cars. Now, if common report is to be believed, these are owned by private individuals or companies, who in some cases secure favorable contracts by giving managers of roads stock gratuitously or at a low price, who thus share with them the immense profits they make out of the community, and prevent any outsiders from competing with them. If this is not the case the public should be disabused.

Mr. Galt thus sums up the whole matter:

"The very low cost of the conveyance of passengers and merchandise on railways is proved by calculations founded on the traffic returns from the Board of trade and the companies. It is shown that a passenger, taking an average of the three classes, can be conveyed a hundred miles when an engine is fully loaded, as in excursion trains, for four pence (eight cents), that charge not only covering every direct expense, but also a fair per centage added for the general expenditure of the establishment. A ton of merchandise can be conveyed a hundred miles for a little more than a shilling (twenty-four cents. The tariff for the different kinds of merchandise as at present charged is given, whereby it is seen that the general charge in many cases is more than twenty times what it costs the companies."

But notwithstanding all this there is no cause of complaint, except against the system which is permitted to continue. The directors hold these highways as a trust, to be exercised not for the benefit of the general community, but solely for the profit of the general stockholders, to whom the railways are supposed exclusively to belong, and by whom these directors are paid for their services. Their object is to obtain the greatest profit for the shareholders, with the least trouble to themselves, without any more regard to the interests of the public than is necessary for effecting that object.

Perhaps no more striking case can be adduced to this fact than that of the Western Railroad in Massachusetts. This road was one of the first in the world that was carried over great elevations. It was built by the contributions of patriotic citizens with the assistance of the State. The object was to bring freight and passengers from the West by way of Albany and Springfield to the capital of Massachusetts. The road was supposed to be extremely successful. Shareholders who received ten per cent. on their investment, and editors who rode free and shared the hospitalities of the officers, were loud in their praises of its management. But an application for a purchase by the State led to an investigation, when it was found that for twenty years there had not been added one car to accommodate the freight business between Boston and Albany, and that the through tonnage of the Western Railroad to Boston was a trifle

greater in 1847 than in 1865, although the tonnage arriving at Albany by rail had increased 149 per cent. It was found that produce from the West was sent by other routes, hundreds of miles out of the way, and much of what came to Albany was sent down the Hudson to New York by boat, from New York to New Haven or Hartford, and by railroad from those cities to Springfield, 200 miles out of the way, with two or three additional handlings. Now, when it was found that the President of the Western Railroad was interested in some or all of these modes of conveyance, some persons felt indignant, but they had no just cause. It was the system, not any man, who was in fault. The course of the directors of this road may not have been patriotic or philanthropic, but it was entirely lawful. The road between Springfield and Worcester could learn all that was required by the shareholder. The State directors made no complaints, and the law gave the people no rights which a railway director was bound to respect.

How, then, can such abuses be remedied? It is evident that the interest of the railways, as at present managed, is to do a small business at a large price, and that the interest of the public in cheap food and cheap transportation requires that a large business should be done at a smaller one. These great thoroughfares are arteries of trade, and should never be entrusted to private monopolists or speculators. They should be managed by those who are directly responsible to the people, and who have an interest in facilitating business rather than earning dividends.

There is but one way of effecting this object—the purchase of the great thoroughfares by the State or the nation. If I were called upon to propose a plan, it would be that the State or the United States should purchase the great trunk railroads, furnish the locomotive power, and lay down a third or, if necessary, a fourth track, exclusively for freight. This should be carried at a regular and comparatively slow rate of speed, and the road be open to free competition for all persons, companies or corporations who might desire to put passenger, freight or mail trains thereon being subject to such regulations and liable to such tolls as Congress or the State Legislature might establish.

If these railroads should be purchased by the government, either of State or nation, the shareholders might be induced to giving up property from which a fluctuating dividend was received and take in exchange a fixed annuity for an equal or a less amount. Those in favor of the bills now before Congress find some objections. They say that millions of the stock upon which dividends are paid, and the public are taxed, should never have been issued, that they are in the cant phrase merely "water." That the roads can now be constructed at a far less expense, and that the public should not be called upon to pay for that which should never have had an existence—that is, for shares on which a cent has never been paid by the shareholders. If these shares were held now by those to whom they were originally given, there would be force in the argument, but as many are the property of those who had nothing to do with pouring in the water, they should not be prejudiced by another's action.

There is one consideration that renders the right of the State to take these roads on payment of a fair equivalent eminently just. Railroad corporations are different from any others. The State entrusts to the cor-

poration the highest privilege she possesses, that of "eminent domain." She permits these officers to take from the citizen, without his consent, any bond they please, and only give him the privilege of obtaining what a jury consider the land would be worth in the market, with no respect to his interests or associations, or to the injury it may do to his other property. This power is entrusted solely for the public good, and when the public interest demands it the State should again exercise their right of eminent domain, and take, on the payment of a just sum, for the public good what they previously granted for that good, and not for the profit of private speculators.

In many charters, as originally granted, any person could put his carriages on the road by paying tolls to the company. The great expense of locomotives and want of depot grounds rendered this a dead letter. A different policy would reverse it.

I am well aware that the managers of railroads throughout the country will look upon the proposition to make so great a reduction of fares with distrust. They may say "that it is a preposterous plan, utterly unsupported by facts, resting entirely on assumption," the very language that was used by Col. Maberly, the Secretary of the General Post Office, when Rowland Hill proposed to reduce the postage to a uniform rate—from sixpence (12c.) to a penny (2c.) We all know the triumphant success that has attended the measure, both as a financial advantage and a national blessing. It was not many years before the number of letters in England increased from seventy-five to seven hundred millions per annum, and a greater revenue than under the old tariff.

Citizens accustomed to the old monopoly will say, your prices will never pay the cost of running and keeping the road and rolling-stock in repair and provide also a million for the payment of the State's interest. My answer is, that the experience in England shows that the freight and passengers are trebled by such a reduction, and treble the through, with a moderate addition on the prices of way business, will raise the amount. But it is not essential that it should pay at once; ultimately it will do so. The States are not entering into a speculation for profit. Whatever they lose, the people will gain ten times over, in the increase of the value of their property, and in the decrease of the price of all the necessities of life.

Sir Robert Peel, in 1841, said in effect to Parliament, "Give me a direct payment of five millions per annum, and I will reduce the taxation on tea, coffee, sugar, and all the necessities of life to the amount of twenty." He redeemed his pledge. He reduced the revenue derived from those sources that amount, and the increased consumption arising from the reduction of price made up three-fourths of the loss to the revenue, and the income tax paid the rest. A statesman like Sir Robert Peel would say to our legislators, "Purchase these roads, put a direct tax on the State, put the freights from the West at a price that will only cover the cost of repairs and transportation, and you will return to the people annually millions in the reduction of the prices of corn, flour, wheat, pork, beef, wool, cotton, cheese, butter, coal, iron, and in short, of every production of your country, to the universal relief of the poorer and commercial classes. You will double the taxable property of your capi-

tal, and of every town and city on the line of railroad, or connected with it. You will enable the poor man to travel, not alone, but with his wife and children, and you will connect the different sections of the country indissolubly with one another."

To this purchase I anticipate three objections. First, It involves the necessity of a new debt either for the State or the nation. But a debt based on property of such great and increasing value would command the money at a rate that would enable the government to reduce the fares and freights at once from one-third to one-half, and provide a sinking fund for the repayment of the outlay. What financier would hesitate to run in debt for a property that would thus pay both principal and interest, and ensure immense and incalculable benefits to his family. The people are the family of the republic.

A second objection is that railways cannot be as well managed by the representatives of the people as by those chosen by private shareholders. If by this is meant that they cannot be as well managed for the purpose of giving large dividends to stockholders to make the fortunes of managers, I allow it. But if railroads are made for the people, and not the people for railroads, I deny it. The Western railroad of Massachusetts was admirably managed. By what it did between Springfield and Worcester, it gave ten per cent. to the shareholders, and by what it did not do, between Albany and Springfield, it gave princely fortunes to its managers. But in the meantime, the people of New England paid millions of dollars more for the transportation of Western produce than they would have done under the system that I recommend. The best management for the public is that which does the business for the lowest price. Besides this, the directors are, by my system, relieved from furnishing and loading and unloading of cars, and confined to the care of the road bed and the furnishing of power.

But the great objection made to the possession of these roads by the State or nation is, that their management will get into politics. To which it may be replied, that it is already in politics, and in a most disastrous way. The real question is, Can republican institutions and the present powerful monopolies exist together? It is notorious that large sums are spent in bribing and influencing legislature to allow these corporations to assess yet heavier taxes on the people. They have too much of the law on their side, and their wealth enables them to retain all the best ability of the bar. A gentleman of Pennsylvania, one of the first financiers in the land, had a controversy with one of these corporations in another State. He told me he went from one end of it to the other, and could find no lawyer of any weight or distinction who was not retained against him. And if I can believe statements confidently made to me, this monopoly of legal talent exists to-day in Massachusetts. There is no fault to be found with gentlemen of the legal profession. It is their interest and duty to aid with their counsel and influence those who are able to retain them. But we must object to the existence of a power that can appropriate all the talent and learning of a profession, and deprive the people of the natural protectors of their rights in any controversy to which encroachments may provoke them. No person whose attention has not been directed to the subject can have any idea of the influence and power these monopolies exert. They control the press to a perilous extent. There are,

no doubt, honorable exceptions, but you will generally find the columns of influential journals too full to admit any criticism on the doings of railway managers. I have heard of cases when such communications have been refused when the writers offered to pay for them as advertisements. Merchants often come to me with complaints, but they almost invariably charge me not to mention their names. Why? "I do business on the road, and it will never do for me to get the ill will of the managers," or "I have need of bank accommodation, and a knowledge that I ever said anything against corporations in which they were interested might prejudice me with Directors." In short, I have come to the conclusion that the people must undertake this reform for themselves. They will have small assistance from so called leaders who are troubled with political aspirations or financial necessities. But in the hands of the people, as soon as the necessary information can be diffused among them, this great movement is safe. The management of railways will yet be vested in the State, and every citizen will be an outspoken and interested detective to see that the duty is well performed.

RAILROAD LEGISLATION—C. F. ADAMS, JR.—The article on "Railroad Legislation" which appeared in the November issue of the magazine was from the pen of Charles Francis Adams, Jr., of Boston.

MR. McCULLOCH'S ANNUAL REPORT.

The balance sheet of the nation for the last fiscal year has just been laid before Congress in the usual reports, according to law, and we have now before us, in a compendious, authentic shape, for the information of Congress and the people, a record of the doings of the Federal Treasury, with the receipts and disbursements of its several bureaus during the most interesting period of our financial history as a nation. Because of its prominent interest we give up a large part of our space to Mr. McCulloch's very elaborate report, which, with the accompanying documents, is unusually voluminous, although from some cause it does not seem to have commanded quite so much attention as his former efforts. Among the momentous matters on which just now the public will seek information in these volumes, the first in point of importance is the public debt, whose burden and pressure were made heavier last year by a large increase of our gold-bearing bonds and by the payment of the accumulated interest of nearly 20 per cent. on the compound notes, which have recently matured. From this and other causes, which we omit for the present, the interest disbursements for the whole fiscal year, were \$143,781,591. Next year they will be larger still. In 1866 the interest amounted only to \$96,894,260; in 1865. to \$77,397,712; in 1864, to \$53,685,421, and in 1863, to \$24,29,846.

It is certainly fortunate that we have been able to reduce the principal of our debt while the pressure of the interest was smaller, for hereafter we shall be less successful in that respect than some of our financial pro-

phets have been promising us. As to the reduction which has been reported since 1865 we should remember that part of it is rather nominal than real. For in that year we had the army to pay off and other vast disbursements to make. So we over-borrowed or anticipated the revenue of the year, and, as the British and French governments often do, we repaid the over-borrowed money as fast as we collected our taxes. Besides this, the interest on the compound notes for 1865 and 1866 was not paid at all during those years, because it did not accrue until the maturing of the notes, some of which have now eight or nine months to run. Still, with all these explanations and deductions, the progress we have made in keeping down and consolidating the public debt is very satisfactory. During the latest months of the war few of us anticipated that the aggregate would fall below 3,000 millions, and very good judges estimated it at 3,500 millions, or more. Nor, considering the gigantic dimensions of our five years' war for the Union, did that amount seem extravagant. Yet, as Mr. McCulloch tells us, the debt never exceeded 2,758 millions, and we have brought down this nominal aggregate to about 2,490 millions, which is probably as low a point as, for the present, we should aim at. Our great task is set so far as the debt is concerned for the current year. It is this: to get rid of all the troublesome mass of short date Treasury obligations, and convert them into long bonds. The most mischievous part of this short paper has been already called in and cancelled. The temporary loans, the certificates of indebtedness, and other interest-bearing demand obligations have been paid off, and such embarrassing loans will never, we presume, be negotiated again. They were useful as an expedient of war finance, but with returning peace their usefulness vanished, and they became a source of weakness, a treacherous nuisance, and a snare. The Seven-Thirty notes now aggregate no more than 338 millions, out of 830 millions originally issued; and the compound notes are all paid off, except about 70 millions, which will mature at intervals from now to November next.

The small compass into which the short obligations are shrinking, reminds us of the near approach of the time when our gold-bearing debt will have touched its highest point. In view of that contingency, Mr. McCulloch puts forth a proposition to offer to the public a six per cent. loan in which to consolidate all existing indebtedness of the Government. In its present shape the plan is made needlessly repulsive and impracticable by being coupled with a curious project for paying to the States 20 millions a year from the National Treasury as taxes. We refer our readers to Mr. McCulloch's own argument about this unprecedented method of making the Treasury at Washington tributary to the several treasuries of the individual States. At present we need not discuss it further than to suggest, whether, if there be a need to pay the States any commutation for their being forbidden to tax the national securities, the better way would not be to vote the proper amounts annually out of the revenue. It is one of the least of the evils of this scheme, that it would open a new door for the admission of speculation and fraud into the departments at Washington. If Mr. McCulloch's new five-six-twenties could be negotiated at all he must submit to unfavorable terms; and in distributing the one per cent. tax in proportion to the population he

would impose an unjust burden on the citizens of the few States where the bonds are chiefly held; for he would compel these persons to pay a part of the taxes of other States where the bond-holders are relatively few.

The proper plan, no doubt, is to consolidate the debt into a long 5 per cent. loan; as we have often repeated, an absolute long loan is preferable to a conditional one. It might run for not less than 30, nor more than 50 years, and should be subject to the existing sinking fund laws. The *London Times* lately accounted for the high rates of interest we are paying on our debt by the statement that the vast aggregate of it consisted of terminable annuities, which would expire in 20 or 40 years. The 8 per cent. we pay on our long bonds was represented as being in part a repayment of a yearly instalment of the principal. This extraordinary mistake on the part of the leading London journal may perhaps contain a valuable suggestion. At any rate it is worth our while to consider whether a part, at least, of our foreign debt might not be converted into terminable annuities on a satisfactory basis. The present stagnation of the money market of Europe, and the indisposition to invest in ordinary securities, which is especially complained of in England, originates chiefly with the class of persons to whom a terminable annuity would be attractive. We offer the suggestion not as final, but as worthy of discussion and examination. We are not sure that it would be practicable; but if so, it would no doubt be a very judicious step for us to take a large part of the 350 millions, or 400 millions, of United States bonds which are held abroad and convert them into terminable annuities; while the rest, together with our bonds held at home, should be consolidated into absolute long bonds, bearing a low rate of interest. The mischievous propositions which have been made to pay off the debt in greenbacks will perhaps do all the service they are capable of conferring on the National credit, if they lead us to settle upon and to establish some comprehensive method of consolidating our debt on a firm unimpeachable foundation.

The question of consolidating the debt is only second in importance to that of contracting the currency. As we hinted a fortnight ago, the Committee of Ways and Means have introduced a bill revoking the contracting power given to the Secretary of the Treasury by the act of April, 1866. From the best information we can obtain, the inference seems inevitable that this Act will pass the House, but it will certainly meet a formidable opposition in the Senate. Still it does not follow that the discretion withdrawn from the Secretary, greatly to the relief of that overburdened officer, will not be vested elsewhere; or that contraction, if temporarily stopped, will not be renewed when it shall seem safe, needful, and for the good of the country. The plan has been more than once suggested in our columns of appointing a Committee to manage the Currency whose proceedings shall be public, and whose powers shall be clearly ascertained and laid down by the law. As to the necessity of contraction, with a view to the appreciation of our redundant currency it is almost universally admitted, and the chief arguments for it are well put in Mr. McCulloch's report. What is wanted, however, seems to be not to prove that contraction is necessary but to show how it can be done, how the transition from the small paper dollar to the large gold dollar

as a unit of value, and a measure of prices, can be made so gently and imperceptibly as to create scarcely a ripple on the surface of the financial currents. Two methods are proposed for meeting this difficulty. One is Mr. Broomall's, which we briefly described last week; the other is to supply the place of cancelled greenbacks by legal tender notes which should bear interest so as gradually to lose their functions as currency. Perhaps both these plans are capable of being carried on together, each supplementing the deficiencies of the other. However this may be, we regret that Mr. McCulloch did not refer in his report to the comparative value of different methods of contraction.

There are several other questions on which information will be eagerly sought in the Treasury report. During the last two or three years we have, beyond all doubt, caused our currency to appreciate in value, so far as a vigorous contraction of its volume could contribute to that result. To prove this we have only to look at the figures. On the 1st November, 1865, the currency afloat amounted to \$925,757,080, which was distributed as follows:—Greenbacks and fractional currency, \$454,218,038; National and State bank notes, \$270,000,000; interest-bearing notes, \$205,549,042. A year later, in November, 1866, the aggregate currency was \$885,295,935, of which the greenbacks were \$417,683,695, the bank notes \$320,000,000, and the interest-bearing notes \$148,572,140. After the lapse of another year, on 1st November, 1867, the currency had fallen to \$657,726,411, which was as follows:—Greenbacks and fractional currency, \$387,871,277; National and State bank notes, \$297,980,094; interest-bearing notes, \$71,875,040.

These changes are very suggestive. They show that during the fiscal year 1865-6, the volume of the currency was depleted by 44 millions, while during the past year the contraction reached the aggregate of 128 millions. How, it is asked, could so violent a contraction be tolerable with so little of injury to business or disturbance of financial confidence? Why has the price of gold so stubbornly resisted while the downward pressure of prices was everywhere else universal? In what degree is the comparative ease of the money market during the rapid shrinkage of the currency to be ascribed to the fact that the chief part of the contraction has been done by means of interest bearing notes according to the method described above? Any man will do good service to the country who shall solve these problems, and shall show us how far they are explicable by rapid changes in the volume of business since the close of the war; by the cessation of the vast movements of greenbacks into and out of the Treasury; by the use of a large amount of currency in the South; by the changes which have taken place in the demand for currency during the gradual shrinkage in the supply. We cannot help thinking that Mr. McCulloch would have spared himself some needless mistakes and would have given a more useful explanation of the phenomena if he had fixed his eyes more upon the domestic causes of currency perturbation and less upon the foreign exchanges.

DEPARTMENT REPORTS.

REPORT OF THE SECRETARY OF THE TREASURY.

TREASURY DEPARTMENT, }
WASHINGTON, Nov. 30, 1867. }

In conformity with law, the Secretary of the Treasury has the honor to submit to Congress this his regular annual report :

The finances of the United States, notwithstanding the continued depreciation of the currency, are in a much more satisfactory condition than they were when the Secretary had the honor to make to Congress his last annual report. Since the first day of November, 1866, \$493,990,263 34 of interest bearing notes, certificates of indebtedness and of temporary loans, have been paid or converted into bonds ; and the public debt, deducting therefrom the cash in the Treasury, which is to be applied to its payment, has been reduced \$59,805,555 72. During the same period decided improvement has also been witnessed in the general economical condition of the country. The policy of contracting the currency, although not enforced to the extent authorized by law, has prevented an expansion of credits, to which a redundant and especially a depreciated currency is always an incentive, and has had no little influence in stimulating labor and increasing production. Industry has been steadily returning to the healthy channels from which it was diverted during the war, and although incomes have been small, and trade generally inactive, in no other commercial country has there been less financial embarrassment than in the United States.

In order that the action of the Secretary, in the financial administration of the Department, may be properly understood, a brief reference to the condition of the Treasury at the time the war was drawing to a close, and at some subsequent periods, seems to be necessary.

FINANCIAL CONDITION AT THE CLOSE OF THE WAR.

On the 31st day of March, 1865, the total debt of the United States was \$2,366,955,077 34, of the following descriptions, to wit :

Funded debt.....	\$1,100,361,341 89
Matured debt.....	846,430 00
Temporary loan certificates.....	52,432,338 26
Certificates of indebtedness.....	177,791,000 00
Interest-bearing notes.....	533,812,800 00
Suspended or unpaid requisitions.....	114,258,543 98
United States notes (legal tenders).....	432,193,589 00
Fractional currency.....	24,454,044 07
Total.....	\$2,428,487,003 16
Cash in the Treasury.....	56,421,324 84
Total.....	\$2,506,955,077 34

The resources of the Treasury consisted of the money in the public depositories in different parts of the country, amounting as above stated to \$56,481,924 84 ; the revenues from internal taxes and customs duties, and the authority to issue bonds, notes, and certificates, under the following acts to the following amounts :

Acts of F. b. 25, 1862, bonds.....	\$4,033,000 00
Act of March 3, 1864, bonds.....	37,229,900 00
Act of June 30, 1864, bonds, 7-30 or compound notes.....	79,811,000 00
Certificates for temporary loans, act June 30, 1864.....	97,546,471 71
United States notes for payment of temporary loans, act July 1, 1865.....	16,899,431 00
Fractional currency, act June 30, 1864.....	26,745,905 98
Act of March 3, 1865, bonds or interest-bearing notes.....	532,597,300 00
Making a total of.....	\$784,783,506 74

Certificates of indebtedness, payable one year from date, or earlier, at the option of the Government, bearing interest at the rate of 6 per cent. per annum, might be issued to indefinite amount, but only to public creditors desirous of receiving them in satisfaction of audited and settled demands against the United States.

Early in April, the fall of Richmond and the surrender of the forces which had so long defended it, rendered certain that the war was soon to be terminated, and that provision must be made for the payment of the army at the earliest practicable moment.

THE NEW LOAN.

The exigency was great. * * * * But as a considerable amount of the Seven-Thirty notes had recently been disposed of satisfactorily by the Department, and had proved to be the most popular security ever offered to the people, the Secretary determined to rely upon them (although on the part of Government they were in many respects objectionable), and in order to insure speedy subscriptions, to place them within the reach of all who might be willing to invest in them. * * * * An evidence of the necessity that existed for prompt action in the negotiation of this loan, and the straits to which the Treasury was reduced, it will be remembered by those who examined carefully the monthly statements of the Departments, that although during the month of April, upward of one hundred millions of dollars had been received from the sale of 7.30 notes, the unpaid requisitions, at its close, had increased to \$120,470,000, while the cash (coin and currency) in all the public depositories amounted only to \$16,835,800. If few men intrusted with the management of the finances of a great nation were ever in a position so embarrassing and trying as was that of the Secretary of the United States Treasury in the month of April and May, 1865, none certainly were ever so happily and promptly relieved.

Between the first days of April and September, 1865, the Secretary used his authority to issue securities as follows :

Bonds under the act of February 25, 1863.....	\$4,023,660 00
Bonds under the act of June 30, 1864.....	6,000,000 00
Compound interest notes, act June 30, 1864.....	24,978,890 00
Certificates for temporary loans, act June 30, 1864.....	54,796,384 87
Fractional currency, act June 30, 1864.....	2,090,048 44
Seven-Thirty notes, March 3, 1865.....	532,187,700 00
Total.....	\$680,996,643 31

On the 31st of August, 1865, the public debt reached the highest point, and was made up of the following items, *viz* :

Funded debt.....	\$1,109,568,191 80
Matured debt.....	1,508,080 09
Temporary loans.....	107,437,316
Certificates of indebtedness.....	85,093,000 00
Five per cent. legal-tender notes.....	33,954,300 00
Compound interest legal tender notes.....	317,094,160 00
Seven-Thirty notes.....	830,000,000 00
U. S. notes (legal-tenders).....	433,160,569 00
Fractional currency.....	16,814,743 51
Suspended requisitions uncalled for.....	2,111,000 00
Total.....	\$3,845,907,826 56
Deduct cash in Treasury.....	89,218,055 13
Balance.....	\$3,757,689,771 43

Of these obligations, it will be noticed, \$684,138,959 were a legal-tender, to wit :

United States notes.....	\$433,160,569
Five per cent. notes.....	33,954,330
Compound interest notes.....	217,024,160
Total.....	\$684,138,959

A very large portion of which were in circulation as currency.

The temporary loans were payable in thirty days from the time of deposit, after a notice of ten days.

The five per cent. notes were payable in lawful money, in one and two years from December 1, 1863.

The compound interest notes were payable in three years from their respective dates, all becoming due between the 10th day of June, 1867, and the 16th day of October, 1868.

The Seven-Thirty notes were payable, in about equal proportions, in August, 1867, and June and July, 1868, in lawful money, or convertible at maturity, at the pleasure of the holder, into Five-Twenty bonds.

The certificates of indebtedness would mature at various times between the 31st of August, 1865, and the 2d day of May, 1867.

THE FUNDING PROCESS.

During the month of September, 1865, the army having been reduced nearly to a peace footing, it became apparent that the internal revenues and the receipts for customs would be sufficient to pay all the expenses of the Government and the interest on the public debt, so that thenceforward the efforts of the Secretary were to be turned from borrowing to funding. Besides the United States notes in circulation, there were nearly \$1,300,000,000 of debts in the form of interest-bearing notes, temporary loans and certificates of indebtedness, a portion of which were maturing daily, and all of which, with the exception of the temporary loans, (which, being in the nature of loans on call, might or might not be continued, according to the will of the holders,) must be converted into bonds or paid in money before the 16th of October, 1868. The country had passed through a war unexampled in its expensiveness and sacrifice of lives; it was afflicted with a redundant and depreciated currency; prices of property and the cost of living had advanced correspondingly with the increase of the circulating medium: men, estimating their means by a false standard of value, had become reckless and extravagant in their expenditures and habits; business, in the absence of a stable basis, was unsteady and speculative, and great financial troubles, the usual result of expensive wars seemed to be almost inevitable. It was under such circumstances that the work of funding the rapidly maturing obligations of the Government and restoring the specie standard was to be commenced. While the latter object could not be brought about until the former had been accomplished, it was highly important that the necessity of an early return to specie payments should never be lost sight of. At the same time, it seemed to the Secretary that a return to the true measure of value, however desirable, was not of sufficient importance to justify the adoption of such measures as might prevent funding, and injuriously affect those branches of industry from which revenue was to be derived, much less such measures as might, by exciting alarm, precipitate the disaster which so many anticipated and feared. Thus the condition of the country and the Treasury determined the policy of the Secretary, which has been to convert the interest-bearing notes, temporary loans, &c., in gold-bearing bonds, and to contract the paper circulation by the redemption of United States notes. For the last two years this policy has been steadily, but carefully pursued, and the result upon the whole has been satisfactory to the Secretary, and, as he believes, to a large majority of the people. Since the first day of September, 1865, the temporary loans, the certificates of indebtedness, and the five per cent. notes have all been paid, (with the exception of small amounts of each not presented for payment,) the compound interest notes have been reduced from \$217,024,160 to \$71,875,040, (\$11,560,000 having been taken up with three per cent. certificates;) the seven and three-tenth notes from \$830,000,000 to \$337,978,800; the United States notes, including fractional currency, from \$459,505,311 51 to \$387,871,477 39—while the cash in the Treasury has been increased from \$88,218,055 13 to

\$133,998,398 02, and the funded debt has been increased \$686,584,800. While this has been accomplished there has been no commercial crisis, and (outside of the Southern States, which are still greatly suffering from the effects of the war and the unsettled state of their industrial interests and political affairs) no considerable financial embarrassment.

RESUMPTION OF SPECIE PAYMENTS.

In his last report, the Secretary remarked that "After a careful survey of the whole field, he was of the opinion that specie payments might be resumed, and ought to be resumed, as early as the 1st day of July, 1868, while he indulged the hope that such would be the character of future legislation and such the condition of our productive industry that this most desirable event might be brought about at a still earlier day." These anticipations of the Secretary may not be fully realized. The grain crops of 1866 were barely sufficient for home consumption. The expenses of the War Department, by reason of Indian hostilities and the establishment of military governments in the Southern States, have greatly exceeded the estimates. The Government has been defrauded of a large part of the revenue upon distilled liquors, and the condition of the South has been disturbed and unsatisfactory. These facts, and the apprehension created in Europe, and to some extent at home, by the utterances of some of our public men upon the subjects of finance and taxation, that the public faith might not be maintained, may postpone the time when specie payments shall be resumed. But, notwithstanding these unexpected embarrassments, much preliminary work has been done, and there is not, in the opinion of the Secretary, any insuperable difficulty in the way of an early and a permanent restoration of the specie standard. It may not be safe to fix the exact time, but, with favorable crops next year and with no legislation unfavorable to contraction at this session, it ought not to be delayed beyond the 1st of January, or at the furthest the 1st of July, 1869. No thing will be gained, however, by a forced resumption. When the country is in a condition to maintain specie payments they will be restored as a necessary consequence. To such a condition of national prosperity as will insure a permanent restoration of the specie standard the following measures are, in the opinion of the Secretary, important, if not indispensable:

First.—The funding or payment of the balance of interest-bearing notes, and a continued contraction of the paper currency.

Second.—The maintenance of the public faith in regard to the funded debt.

Third.—The restoration of the Southern States to their proper relations to the Federal Government.

If this opinion be correct, the question of permanent specie payments, involving as it does the prosperity of the country, underlies the great questions of currency, taxation and reconstruction, which are now engaging the attention of the people, and cannot fail to receive the earnest and deliberate attention of Congress. In view of the paramount importance of this great question the Secretary deems it to be his duty briefly to discuss the measures regarded by him to be necessary for an early and wise disposition of it, even at the risk of a repetition of what he has said in previous communications to Congress.

THE MEASURES NECESSARY.

The measures regarded by him as important, if not indispensable for national prosperity, and as consequence for a permanent resumption, are—

First.—The funding or payment of the balance of interest bearing notes, and a continued contraction of the paper currency.

By the act of March 2, 1867, the Secretary was authorized and directed to issue 3 per cent loan certificates to the amount of fifty millions of dollars, for the purpose of redeeming and retiring compound interest notes; and such certificates,

on the 1st inst., had been issued to the amount of \$11,560,000, in redemption of the notes becoming due in October and December. The notes still out-standing will be either taken up with certificates or paid at maturity. The seven and three-tenth notes, being payable in lawful money, or convertible at the option of the holders into Five-Twenty bonds, will be paid or converted according to the terms of the contract. Fortunately all the interest-bearing notes are to be paid or converted within eleven months, and they need not therefore be regarded as a serious impediment to a return to the true standard of value. As to the redemption of these notes, and the manner in which they should be redeemed, there cannot, of course, be much difference of opinion. *It is in regard to a contraction of the currency, and upon which of the two kinds of currency—United States notes or the notes of the National Banks—contraction should be brought to bear; that a difference of sentiment seems to exist.*

In his report to Congress, under date of the 4th of December, 1865, the Secretary presented, as fully and as clearly as he was able to do, his views upon the subject of the currency, and the necessity of action for the purpose of bringing about a return to specie payments. The views thus presented by him were approved by the House of Representatives on the 8th December, 1865, by the adoption of the following resolution, by the decisive vote of 144 to 6 :

Resolved, That this House cordially concurs in the views of the Secretary of the Treasury in relation to the necessity of a contraction of the currency, with a view to as early a resumption of specie payments as the business interests of the country will permit; and we hereby pledge co-operative action to this end as speedily as practicable.

These views are not only approved by the House of Representatives, but they seemed at the time to be heartily responded to by the people. By the act of April 12, 1866, the Secretary was authorized to receive Treasury notes and other obligations of the Government, whether bearing interest or not, in exchange for bonds, with a proviso that, of United States notes, not more than \$10,000,000 should be canceled within six months of the passage of the act, and thereafter not more than \$4,000,000 in any one month. This proviso, while it fixed a limit to the amount of notes which should be retired per month, so far from indicating an abandonment of the policy of contraction, confirmed and established it. To this policy (although for reasons that seemed to him judicious, the regular monthly reduction has not always been made) the action of the Secretary has been conformed, and the effect has been so salutary, and the continuation of it would be so obviously wise, that he would not consider it necessary to say one word in its favor were there not indications that, under the teachings of the advocates of a large and consequently a depreciated currency, such views are being inculcated as, if not corrected, may lead to its abandonment.

THE NATIONAL DEBT—NATURE OF THE PLEDGE.

But the public faith does not depend alone upon adequate revenue laws, nor upon economy in the administration of the Government. It rests also upon the observance of contracts in the spirit as well as in the letter. * * * Now, to what is the United States pledged in regard to the public debt? Is it not that it shall be paid according to the understanding between the Government and the subscribers to its loans at the time the subscriptions were solicited and obtained? And can there be any question in regard to the nature of this understanding? Was it not that, while the interest-bearing notes should be converted into bonds or paid in lawful money, the bonds should be paid, principal as well as interest, in coin? Was not this the understanding of the Congress which passed the loan bills and of the people who furnished the money? Did any member of the House or of the Senate, prior to 1864, in the exhaustive discussions of these bills, ever intimate that the bonds to be issued in accordance with their

provisions might be paid, when redeemable, in a depreciated currency? Was there a single subscriber to the Five-Twenty bonds or to the Seven and three-tenth notes which by their terms were convertible into bonds, who did not believe, and who was not given to understand by the agents of the Government, that both the principal and interest of these bonds were payable in coin? Does any one suppose that the people of the United States, self-sacrificing as they were in the support of the Government, would have sold their stocks, their lands, the products of their farms, of their factories and of their shops, and invested the proceeds in Five-Twenty bonds and Seven and three-tenth notes, convertible into such bonds, if they had understood that these bonds were to be redeemed after five years from their respective dates in a currency of the value of which they could form no reliable estimate? Would the Secretary of the Treasury, or would Congress—when the fate of the nation was trembling in the balance, and when a failure to raise money for the support of the Federal army would have been success to the rebellion and ruin to the Union cause—have dared to attempt the experiment of raising money on bonds redeemable at the pleasure of the Government after five years, in a currency the convertible value of which might not depend upon the solvency of the Government, but upon the amount in circulation? No such understanding existed, and fortunately no such experiment was tried. The bonds were negotiated with the definite understanding that they were payable in coin, and the Seven and three-tenth notes with an equally definite understanding that they were convertible at the option of the holder into bonds of a similar character, or payable in lawful money. The contracts were made in good faith on both sides, a part of them when the Government was in imminent peril and needed money to preserve its existence, the balance when its necessities were scarcely less urgent, for the payment of its just obligations to contractors and to the gallant men by whom the nation was saved. Good faith and public honor, which to a nation are of priceless worth, require that these contracts should be complied with in the spirit in which they were made. The holders of our bonds at home and abroad, who understand the character of the people of the United States and the greatness of the national resources, ought not to need an assurance that they will be so complied with.

THE ACTION OF CONGRESS.

Here remarks upon a subject which it ought not to be necessary to discuss might be closed, but the great interest and alarm excited by the doctrines recently promulgated seem to justify a reference to the debates when the act of Feb. 25, 1862, in some respects the most important of the loan bills, was under consideration, in order that the action and intention of Congress in regard to the legal tender notes and to the bonds which it authorized the issue of may be understood.

This act authorized an issue of one hundred and fifty millions of United States notes, which were made receivable for all Government dues, except duties on imports, and of all claims against the United States, except for interest upon bonds and notes, which was to be in coin. It also authorized the issue of five hundred millions of bonds, redeemable at the pleasure of the Government after five years from date. The purpose for which these bonds were to be issued was stated to be "to enable the Secretary of the Treasury to fund the Treasury notes and floating debt of the United States," and he was authorized to dispose of them "at the market value thereof, for coin of the United States, or for any Treasury notes issued under any former act of Congress, or for the United States notes that might be issued under this act." Regarding only the act itself, it is not supposable that Congress intended to provide for funding the floating debt in bonds which might, at the expiration of five years, be called in and paid in the very notes which, with the Treasury notes, were thus to be funded. These bonds, like all others since and previously issued, were intended to be a part of the funded debt of the United States, the right to redeem them after five years hav-

ing been reserved by the Government, not that they might be called in and paid in a depreciated currency, but in order that bonds bearing a lower rate of interest might be substituted for them, if it should so happen that before their maturity money could be borrowed on more favorable terms. The act provides that the United States notes of which it authorized the issue should be receivable in payment "of all claims and demands against the United States of every kind whatsoever, except interest upon bonds and notes, which shall be paid in coin." It is not said that they shall not be receivable for the principal of the bonds, for the very obvious reason that they were expected to be but a temporary circulation. A provision that these notes—intended only to meet a temporary emergency—should not be received for the payment of the principal of bonds which were not redeemable for five years, would, if it had been advocated and insisted upon, have been quite likely to have prevented their issue. The public judgement had not then been perverted by an irredeemable currency, and a proposition that indicated a long continued departure from the specie standard would have found few supporters in Congress or among the people.

THE DEBATES ON THE SUBJECT.

But, if the intention and understanding of Congress are not sufficiently indicated by the language of the act, all doubts must be removed by a reference to the debates while it was under consideration. From these debates it is clear that the issue of the legal tender notes was expected to be limited to one hundred and fifty millions. On this point one of the Representatives from the State of New York spoke as follows :

"Then the whole secret of our financial success lies simply in borrowing five hundred millions, or rather in funding the floating indebtedness convertibly represented by the Treasury notes, so that their issue need never exceed that authorized by this bill, and which is conceded to be the extreme limit consistent with safety to private interest and public credit. Nobody has proposed to rely upon this currency beyond that amount, but on the contrary, the idea of any further similar issue has been expressly repudiated by every supporter of this bill."

One of the Representatives from Massachusetts put to the distinguished Chairman of the Committee of Ways and Means the following question—

"Let me ask the gentleman from Pennsylvania whether he now expects in managing these financial matters to limit the amount of these notes to one hundred and fifty millions. Is that his expectation?"

To which question he received the following reply :

"It is. I expect that is the maximum amount to be issued."

Later in the debate, the same distinguished gentleman used the following language :

"When this question was discussed before the distinguished gentleman from Kentucky (Mr. Crittenden) asked me whether it was the intention or expectation of the House to go on and issue more than one hundred and fifty millions of legal tender notes—a pertinent question, which I saw the full force of at the time. I told him that it was my expectation that no more would be issued by the government; that they would be received and funded in the twenty-year bonds."

It is clear from these quotations, and the whole tenor of the debate, that it was the intention of Congress that \$150,000,000 should be the limit of the legal-tender circulation, and that it was confidently expected that this circulation would soon be converted into the Five-Twenty bonds known as the bonds of 1862, and which are now redeemable according to their tenor. This of itself is a

sufficient explanation of the fact that it was deemed unnecessary to provide that these notes should not be receivable for the principal of the bonds. As the amount to be issued was limited to \$150,000,000, a provision that they should not be receivable for the principal of \$500,000,000 of bonds, to be issued under the same act, in which they were expected to be funded, and which were not to be subject to the control of the Government for five years, would certainly have been regarded as being as singular as it would have been unnecessary. But this not all. The same gentleman, who, as Chairman of the Committee of Ways and Means, was the exponent of the views of the House upon this question, in speaking of these bonds, remarked as follows—

"A dollar in a miser's safe, unproductive, is a sore disturbance. Where could they invest it? In the United States loans at six per cent, redeemable in gold in twenty years—the best and most valuable permanent investment that could be desired."

Would he have regarded these bonds a most valuable permanent investment if he had supposed that they might be redeemed in a depreciated currency at the expiration of five years from date? Again, he said: "But widows and orphans are interested and in tears lest their estates should be badly invested. I pity no one who has money invested in the United States bonds payable in gold in twenty years, with interest semi-annually."

In these debates very little was said upon the subject of the payment of the principal of the bonds, apparently for the reason that no one supposed that they would or could be paid in anything else than in the heretofore recognised constitutional currency of the country. The same may be said in regard to the debates upon the bills authorizing subsequent issues. The acts of March 3, 1863, and March 3, 1864, are the only acts which state expressly that the bonds to be issued under them shall be payable in coin; and this provision in these acts, if not accidental, attracted no attention at the time, either in Congress or with the public. Under the former act seventy-five millions of twenty-years six per cent bonds (part of those known as bonds of 1881) were issued, and under the latter act nearly two hundred millions of five per cent. bonds, known as 'Ten-Forties; and the fact that these six per cent. bonds have had no higher reputation than other bonds of the same class, and that the five per cent. bonds never were a popular security, and have in the market, until very recently, scarcely possessed a value corresponding with the six per cent. Five-Twenties, shows conclusively that dealers in Government securities, and the people generally, have not regarded this provision as placing them on a different footing, as to the kind of money in which they are to be paid, from the bonds issued under acts containing no such provision. There was nothing in the condition of the country when these acts were passed that required an unusual provision, in order that the loans authorized by them might be successfully negotiated; on the contrary, the national credit was better then than at periods when other loan bills were passed; nor was there any intimation by any member of Congress, nor was it ever thought by the officers of the Treasury Department, that the bonds authorized by them were of a different character from those issued under other acts. It is unreasonable to suppose that it was the intention of Congress that the bonds authorized by the act of February 25, 1862, and June 30, 1864, might be paid in legal tender notes, while those authorized by the acts of March 3, 1863, and March 3, 1864, could be paid only in coin. The various issues of bonds, constituting the national funded debt, stand upon the same footing, and all should be paid in coin, if any are so paid. * * * * *

RESTORATION OF THE SOUTHERN STATES.

The importance of the restoration of the Southern States to their proper relations with the Federal Government cannot be over estimated. A curtailment of the currency and the maintenance of the public faith are not all that is required to re-

store the country to perfect financial health. We need, in addition to these, a united country—united in fact as well as in name. It may not be proper for the Secretary in this report to discuss the measures regarded by him as best calculated to bring about this most desirable result. This, however, he feels it to be his duty to say, as he substantially said in his last year's report, that the question of reconstruction, as a purely financial question, is in his judgment, second in importance to none that Congress will ever be called upon to consider. The great staples of the South have for many years constituted a large portion of our exports. But for the cotton held in that section at the close of the rebellion, the foreign exchanges would have been so largely against the United States that a commercial revolution would have been imminent, if not unavoidable. Even in the deplorable condition of these States, last year more than two thirds of our exports consisted of their productions, and it is the crop of the present year—small though it may be—that is to save us from ruinous indebtedness to Europe. It is of the greatest moment, therefore, that the productive power of the Southern States should be restored as rapidly as possible. Little progress has been made in this direction, during the past two years, and no real progress will be made until their political condition is determined by their restoration to the Union with all the rights and privileges of other States under the constitution. The Secretary does not allude to this subject for the purpose of calling the attention of Congress to it. This is unnecessary. It is absorbing the public attention, and the further action of Congress in relation to it will be watched by the people with intense solicitude. Upon the judicious settlement of it depends, in a great degree, the national prosperity. The views presented by the Secretary upon this subject in his last report are equally appropriate at the present time.

A NEW ISSUE OF SIX PER CENT. BONDS.

After giving the subject careful consideration, the Secretary can suggest no better way of doing it than by an issue of bonds to be known as the Consolidated Debt of the United States, bearing six per cent interest, and having twenty years to run, into which all other obligations of the Government shall as rapidly as possible be converted—one sixth part of the interest at each semi-annual payment to be reserved by the Government and paid over to the States, according to their population. By this means all the bonds, wherever held, would be taxed alike, and a general distribution of them be secured. State taxes, including the levies for county and municipal purposes, now, as a general thing exceed one per cent, but when the debts incurred for the payment of bounties are paid (and in many of the States they are already in the process of rapid extinction) and economy is again practiced in State affairs, this indirect assessment will be quite likely to equal the tax assessed upon other property. If the debt to be funded shall amount to \$2,000,000,000 the amount to be reserved and paid to the States annually would be \$20,000,000, which would give to each of the States, in gold, as nearly as can now be estimated, the following sums, to be reduced of course with the reduction of the debt:

Maine.....	\$385,609 76	Arkansas.....	\$397,399 00
Massachusetts.....	748,378 43	Louisiana.....	434,540 77
New Hampshire.....	194,411 17	Texas.....	539,773 49
Vermont.....	186,26 09	Alabama.....	580,513 63
Connecticut.....	283,418 01	Mississippi.....	471,792 31
Rhode Island.....	107,174 16	Georgia.....	648,915 91
New York.....	2,381,825 80	Florida.....	90,990 00
New Jersey.....	413,466 93	South Carolina.....	481,953 12
Pennsylvania.....	1,788,647 13	North Carolina.....	690,634 33
Ohio.....	1,44,659 68	Virginia.....	720,000 00
Indiana.....	636,727 81	West Virginia.....	369,086 19
Michigan.....	473,909 33	Maryland.....	421,609 51
Illinois.....	1,300,892 84	Delaware.....	68,572 43
Wisconsin.....	621,664 48	Kansas.....	166,000 00
Iowa.....	493,159 19	Nebraska.....	30,716 06
Minnesota.....	177,840 91	California.....	298,753 14
Missouri.....	773,831 79	Nevada.....	21,046 72
Kentucky.....	709,806 45	Oregon.....	48,000 76
Tennessee.....	681,147 56		
Total.....			\$30,000,000 00

The advantages to be derived from this plan are so obvious as not to require discussion. It would secure, as has been already stated, such a distribution of the bonds

throughout the States and countries and cities as could not be expected if local taxes should be imposed upon them. It would create an interest in the bonds in States the people of which are justly responsible for the debt, but whose early and complete restoration to the Union is so desirable and important, and would give to them needed aid in their efforts to build up again their own prostrate credit. It would put an end to all discussions and doubts in regard to the kind of currency in which the bonds are to be paid, to all complaints of exclusive privileges, and place the public credit on a basis worthy a nation whose resources, young as it is, are second to those of no other nation, and of whose future resources the present are but an indication.

The bonds, the issue of which is thus recommended, would be six per cents to the Government and five per cents to the holders, which is as low a rate of interest as can be expected to prevail in the United States for many years to come. Of the practicability of converting the outstanding obligations of the Government into this consolidated debt at an early day, at no considerable expense, the Secretary entertains no doubt. It is, therefore, respectfully recommended that the Act of March 3, 1865, be so amended as to authorize the Secretary of the Treasury to issue six per cent. gold-bearing bonds, to be known as the Consolidated debt of the United States, having twenty years to run, and redeemable if it may be thought advisable at an earlier day, to be exchanged at par for any and all other obligations of the Government— one-sixth part of the interest on which, in lieu of all other taxes, at each semi-annual payment, shall be reserved by the Government and paid, over to the States according to population.

THE PUBLIC DEBT.

The following is a statement of the public debt on the 1st of July 1867:

DEBT BEARING COIN INTEREST.			
5 per cent bonds.....	\$128,431,350 00		
6 per cent. bonds of 1867 and 1868.....	15,18,141 80		
6 per cent bonds, 1861.....	233,7 6,850 10		
6 per cent 5-20 bonds.....	1,127,531,800 00		
Navy pension fund.....	13,000,000 00		\$1,007,890,041 80
DEBT BEARING CURRENT INTEREST.			
6 per cent bonds.....	\$14,762,000 00		
Three year compound interest notes.....	123,894,480 00		
Three year 7-30 notes.....	488,047,436 00		636,803,905 00
Matured debt not presented for payment.....			8,997,595 00
DEBT BEARING NO INTEREST.			
United States notes.....	\$371,992,029 00		
Fractional currency.....	78,307,528 53		
Gold certificates of deposit.....	19,307,530 00		419,507,073 53
Total debt.....			\$2,662,199,215 13
Amount in Treasury, coin.....	108,419,688 03		
Amount in Treasury, currency.....	71,979,563 77		\$180,399,251 79
Amount of debt, less cash in Treasury.....			\$1,511,800,013 33

The following is a statement of the public debt on the 1st of November, 1867:

DEBT BEARING COIN INTEREST.			
5 per cent. bonds.....	\$128,843,350 00		
6 " " of 1867 and 1868.....	14,690,941 80		
6 " " 1861.....	233,676,600 0		
6 " " 5-20 bonds.....	1,167,898,110 00		
Navy pension fund.....	13,000,000 00		\$1,773,110,991 80
DEBT BEARING CURRENT INTEREST.			
6 per cent. bonds.....	\$18,042,000 00		
Three year compound interest notes.....	63,558,940 00		
" " 7-30 notes.....	234,007,70 00		
Three per cent. certificates.....	11,560,000 00		\$426,763,640 00
MATURED DEBT NOT PRESENTED FOR PAYMENT.			
3 year 7-30 notes, due Aug. 15, 1867.....	\$3,371,100 00		
Compound interest notes matured June 10, July 15, Aug. 15, and Oct. 15, 1867.....	2,316,100 00		
Bonds, Texas Indemnity.....	292,000 00		
Treasury notes, acts July 17, 1831, and prior thereto.....	161,661 64		
Bonds, April 15, 1841.....	51,061 64		
Treasury bills, March 3, 1863.....	868,240 00		
Temporary loan.....	4,168,375 55		
Certificates of indebtedness.....	34,000 00		\$18,237,538 83

DEBT BEARING NO INTEREST.

United States notes.....	857,161,844 00	
Fractional currency.....	30,706,633 30	
Gold certificates of deposit.....	14,612,900 00—	408,885,677 30
Total debt.....		\$2,625,502,843 02
Amount in Treasury, coin.....	\$111,540,317 35	
Amount in Treasury, currency.....	22,458,080 67—	133,998,398 02
Amount of debt, less cash in Treasury.....		2,491,504,455 00

RECEIPTS AND EXPENDITURES OF THE YEAR.

The following is a statement of receipts and expenditures for the fiscal year ending June 30, 1867:

Receipts from Customs.....	\$176,417,810 88	
Lands.....	1,163,875 78	
Direct tax.....	4,300,223 70	
Internal revenue.....	266,097,537 48	
Miscellaneous sources.....	42,834,859 50—	\$490,634,010 27
Expenditures for the civil service.....	\$51,110,027 37	
Pensions and Indians.....	25,579,063 48	
War Department.....	95,234,415 63	
Navy Department.....	31,034,011 04	
Interest on the public debt.....	148,781,591 91—	\$346,739,129 33
Loans paid.....	\$746,350,585 94	
Receipts from loans.....	640,426,910 20	
Reduction of loans.....		\$107,923,675 65

The following is a statement of receipts and expenditures for the quarter ending Sept. 30, 1867:

Receipts from Customs.....	\$48,081,907 61	
Lands.....	237,480 07	
Direct tax.....	647,070 88	
Internal revenue.....	58,784,027 49	
Miscellaneous sources.....	13,861,462 63—	\$121,161,925 08
Expenditures for the civil service.....	13,159,343 06	
Pensions and Indians.....	10,434,476 11	
War Department.....	30,537,056 85	
Navy Department.....	5,579,704 67	
Interest on the public debt.....	38,515,640 47—	\$98,206,226 13
Loans paid.....	\$900,176,368 34	
Receipts from loans.....	185,103,222 00	
Reduction of loans.....		65,073,096 34

The Secretary estimates that the receipts and expenditures for the three quarters ending June 30, 1868; will be as follows:

Receipts from Customs.....	\$115,800,000 00	
Lands.....	700,000 00	
Internal revenue.....	185,000,000 00	
Miscellaneous sources.....	25,000,000 00—	\$395,000,000 00

The expenditures for the same period, according to his estimates, will be—

For the civil service.....	\$37,000,000 00	
For pensions and Indians.....	22,000,000 00	
For the War Department, including \$24,500,000 for bounties	100,000,000 00	
For the Navy Department.....	23,000,000 00	
For the interest on the public debt.....	114,000,000 00—	\$396,000,000 00
Leaving a surplus of estimated receipts over estimated expenditures of....		\$1,000,000 00

The receipts and expenditures for the next fiscal year, ending June 30, 1869, are estimated as follows:

Receipts from Customs.....	\$145,000,000 00	
Receipts from internal revenue.....	205,000,000 00	
Receipts from lands.....	1,000,000 00	
Receipts from miscellaneous sources.....	30,000,000 00—	\$381,000,000 00

The expenditures are estimated as follows :

For the civil service.....	\$51,000,000 00	
For pensions and Indians.....	8,000,000 00	
For the War Department, including \$85,500,000 for bounties	130,000,000 00	
For the Navy Department.....	86,000,000 00	
For the interest on the public debt.....	180,000,000 00—	\$572,000,000 00
Leaving a surplus of estimated receipts over estimated expenditures of..		\$9,000,000 00

The foregoing estimates are made on the general average of the receipts and expenditures for the past nine months. The Secretary is hopeful, however, that Congress will take measures to largely reduce expenditures in all branches of the service, so that a steady reduction of the debt may be continued.

THE PARIS MONETARY CONGRESS.

The Department of State has referred to this Department, for consideration, the official report of the proceedings of the International Monetary Conference held at Paris in June and July of the present year, and also the report of Mr. Samuel B. Ruggles, the delegate in that Conference from the United States of America. *

* * * The matters thus presented are of high monetary interest to the United States, and merit the attentive and careful examination of its public authorities, executive and legislative. They are fully discussed in the separate report of Mr. Ruggles, under the following heads :

1.—The composition and character of the Conference, embracing nine separate nations, with a population of 320,000,000 inhabitants.

2.—The importance of including, in the proposed monetary reform, the nations of Central and South America.

3.—The necessity of monetary union between the Eastern and Western Continents.

4.—The intermediate position of the two Americas between Western Europe and Eastern Asia, and their duty as the principal producers of the gold of the world.

5.—The cost of recoinage required by the proposed unification, with full statistics of the coinage, past and present, of the United States, Great Britain and France.

The gold coinage of the United States, from 1793 to 1851, the report states to have been.....	\$180,184,266
Of Great Britain, from 1816 to 1851.....	480,105,755
Of France, from 1793 to 1851.....	824,492,516

Total.....	\$284,782,539
From 1851 to 1866 (fifteen years) there has been coined by the United States.....	\$605,352,533
Great Britain.....	455,235,695
France.....	927,736,296

Total.....\$2,108,866,316

6.—The probable rate of future product of gold in the United States.

7 and 8.—The history of the varying coinages of Europe, and their gradual consolidation.

9.—The contrast presented by the coinage of the United States as unified by the Constitution.

10.—The necessity of intercontinental monetary conferences of nations First attempt in the Congress at Berlin in 1863.

11.—Quadripartite monetary treaty of December, 1855, between France, Belgium, Switzerland and Italy, with subsequent adhesion of the Pontifical States and of Greece, partially unifying Europe.

12.—The necessity of a single standard exclusively of gold. The fallacy and impossibility of a double standard of gold and silver.

13.—A "common denominator," or unit, of gold of defined weight and value, rendering "dollars" and "francs" synonymous, or mutually convertible.

14.—Action in the Conference by the delegates from Great Britain.

15.—The consent of France to issue a new gold coin of 26 francs to circulate side by side with the half eagle of the United States and the sovereign of Great Britain, when reduced to that value.

The proper examination of a subject so comprehensive can hardly fail to benefit the Government and the people of the United States. * * *

HUGH McCULLOCH,
Secretary of the Treasury.

STATEMENT OF THE INDEBTEDNESS OF THE UNITED STATES, JUNE 30, 1867.

Acts of	Synopsis of Acts.	Title.	Length of loan.	When redeemable.	Rate of interest.	Amount authorized.	Amount issued.	Amount outstanding.
July 21, '41, and April 16, 1842.	Authorized loan of \$2,000,000, interest not exceeding 6 per cent., reimbursable at will of Secretary, after a month's notice, or at any time after three years from Jan. 1, 1842. The act of April 15, 1842, authorized loan of \$1,000,000 at 5 per cent. This loan was made to redeem outstanding Treasury notes and defray public expenses.	Loan of 1842.	20 years	Dec. 31, '62.	6 p. c.	\$17,000,000	\$8,000,000	\$61,728 68
Jan. 28, '47.	Authorized the issue of \$25,000,000 Treasury notes, interest not exceeding 6 per cent., with authority to borrow any portion of amount and issue bonds therefor, redeemable after Dec. 31, 1867. The 13th section authorized the funding of these notes into bonds of the same description. The act authorized the funding of Treasury notes issued under former acts beyond \$3,000,000.	Loan of 1847.	20 years	Dec. 31, '67.	6	25,000,000	25,207,000	7,100,200 00
Mar. 31, '48.	Authorized a loan of \$16,000,000, reimbursable at any time after twenty years from July 1, 1848. Authority was given to the Secretary to purchase the stock at any time.	Loan of 1848.	20 years	July 1, 1908	6	16,000,000	16,000,000	8,020,941 80
Sept. 9, '50.	Authorized the issue of \$10,000,000 in bonds, redeemable at the time of a next session of the State of Texas at 5 per cent.	Texas Indemnity.	15 years	Dec. 31, '64.	5	10,000,000	5,000,000	203,000 00
Old fund & Consisting of undivided dividends upon stocks issued before the war of 1861, and those issued during the war of 1861.	Authorized the issue of Treasury notes, interest not exceeding 6 per cent., and receivable in payment of public debt, and to be redeemed after the expiration of one year from date of said notes.	Old funded debt.	Dem'd	On demand.	5 & 6			113,915 48
Prior to '57.	Authorized the issue of Treasury notes, interest not exceeding 6 per cent., and receivable in payment of public debt, and to be redeemed after the expiration of one year from date of said notes.	Treasury notes.	1 year.	On demand.	1 m. 6	20,000,000		104,511 64
Dec. 23, '57.	Authorized the issue of Treasury notes, interest not exceeding 6 per cent., and receivable in payment of public debt, and to be redeemed after the expiration of one year from date of said notes.	Treasury notes.	1 year.	On demand.	3 m. 5	20,000,000		2,600 00
June 14, '58.	Authorized a loan of \$20,000,000, reimbursable at any time after expiration of fifteen years from Jan. 1, 1858.	Loan of 1858.	15 years	Dec. 31, '73.	5	20,000,000	20,000,000	20,000,000 00
June 22, '60.	Authorized a loan of \$21,000,000, reimbursable within a period not beyond twenty years, and not less than ten years, for the redemption of outstanding Treasury notes, and for no other purpose.	Loan of 1860.	10 years	Dec. 31, '70.	5	21,000,000	7,922,000	7,422,000 00
Dec. 17, '60.	Authorized an issue of \$10,000,000 Treasury notes, to be redeemed after expiration of one year from date of issue, and bearing such a rate of interest as offered by the lowest bidders.	Treasury notes.	1 year.	1 yr. aft. date	0 & 12	10,000,000	10,000,000	600 00
Feb. 3, '61.	Authorized a loan of \$23,000,000, reimbursable within a period not beyond twenty years, nor less than ten years. This loan for payment of current expenses, and awarded to the most favorable bidder.	Loan of Feb. 8 1861.	20 years	June 1, '81.	0	23,000,000	18,415,000	18,415,000 00

STATEMENT OF THE INDEBTEDNESS OF THE THE UNITED STATES, JUNE 30, 1897.—(Continued.)

Acts of	Synopsis of Acts.	Title.	Length of loan	When redeemable	Rate of interest	Amount authorized.	Amount issued.	Amount outstanding.
March 3, '63	A further issue of \$150,000,000 in United States notes, for converting the Treasury notes which may be issued under this act, and for no other purpose. And a further issue, if necessary, for payment of army and navy, and other creditors of \$150,000,000 in notes, which amount includes the \$100,000,000 authorized by resolution of January 17, 1863.							
April 12, '68	Provided, That of United States notes, not more than ten millions of dollars may be retired and cancelled within six months from the passage of this act, and thereafter not more than four millions of dollars in any one month: And provided further, That the act to which this is an amendment shall continue in full force in all its provisions, except as modified by this act.	U. S. notes, new issue.			None.	450,000,000		371,763,597 00
Feb. 25, '62	Authorized temporary loan of \$25,000,000 in U. S. notes, for not less than thirty days, payable after ten days' notice, at 5 per cent. interest. (This was increased to \$100,000,000 by the following act.)							
Mar'h 17, '62	Authorized an increase of temporary loans of \$25,000,000, interest at rate not exceeding 5 per cent.	Temp'y loan	Not less than 30 days.	After June 30, 1891.	4, 5 & 6.	150,000,000		50,225,070 00
July 11, '62	Authorized further increase temporary loans of \$50,000,000.							
June 30, '64	Authorized increase of temporary loans to not exceeding \$150,000,000, at not exceeding 6 per cent.							
March 3, '63	Authorized a loan of \$300,000,000 for this, and \$300,000,000 for the next fiscal year, for not less than ten, nor more than four years, principal and interest payable in coin. So much of this act as limits loan to current fiscal year is repealed by act of June 30, 1894, which also repeals the authority to borrow money conferred by section 1, except so far as it may affect \$300,000,000 of bonds already advertised.	Loan of 1893.		After June 30, 1891.	6	75,000,000	75,000,000	75,000,000 00
June 30, '64	And Treasury notes the amount of \$40,000,000 not exceeding three years to run. Interest not over 6 per cent, principal and interest payable in lawful money, which may be made a legal tender for their face value, excluding interest, nonconvertible into United States notes. Secretary may receive gold on deposit and issue certificates therefor, in sums not less than twenty dollars.	Treasury notes.	3 years, 1 year.	3 years after date, 1 yr. aft. date.	5	400,000,000	211,000,000	1,123,880 00
March 2, '63		Gold certificates		On demand.		Not specified.		12,907,530 00

March 3, '64	Authorizes issue of bonds not exceeding \$300,000,000, bearing date March 1, 1864, or any subsequent period, redeemable at pleasure of Government after any period not less than five years, and payable at any period not more than forty years from date, in coin, interest not exceeding 6 per cent., payable on bonds semi-annually, and on all other bonds annually, and on all other bonds semi-annually, in coin.	Ten-forties	10 or 40 years.	Feb. 28, '74.	5	\$300,000,000	\$173,770,100	\$171,409,360 00
March 1, '62	Authorized an issue of certificates of indebtedness, payable one year from date, in settlement of audited claims against the Government, interest 6 per cent., payable in gold; and by	Five-twenties	5 or 30 years.	Oct. 31, '69	6	.....	.....	3,823,500 00
March 3, '63	Payable in lawful currency on those issued after that date. Amount of issue not specified.	Certificates of indebtedness.	1 year..	1 yr. aft. date	6	Not specified	.....	36,000 00
July 17, '62	Authorized an issue of notes of the fractional parts of one dollar, receivable in payment of all dues, except customs, less than five dollars, and exchangeable for United States notes in sums not less than five dollars. Amount of issue not specified.	Postal currency	.....	.....	.....	Not specified	.....	5,497,434 93
March 3, '63	Authorized an issue not exceeding \$50,000,000 in fractional currency, (in lieu of postage or other stamps,) exchangeable for U. S. notes in sums not less than three dollars, and receivable for any dues to the United States less than five dollars, except duties on imports. Authority given to prepare it in the Treasury Department.	Fractional currency.	.....	.....	.....	50,000,000	.....	23,807,968 59
June 30, '64	Authorized issue in lieu of issue under acts of July 17, 1862, and March 3, 1863, the whole under all acts not to exceed \$30,000,000	.....	.....	.....	.....	.....	.....	125,561,300 00
June 30, '64	Authorized the issue of \$400,000,000 of bonds redeemable at pleasure after not less than five nor more than thirty years, or, if deemed expedient, made payable at any period not more than forty years from date. Said bonds shall bear interest not exceeding 6 per centum, payable semi-annually in coin.	Five-twenties..	5 or 30 years.	Oct. 31, 1869	6 p. c.	.....	.....	.....
March 3, '63	Authorizes an issue of Treasury notes, not exceeding three years to run, interest not over 6 per cent., principal and interest payable in lawful money. Also, authorizes the issue of and in lieu of an equal amount of bonds authorized by the first section, and as a part of said loan, not exceeding \$300,000,000 in Treasury notes of any denomination not less than \$10, payable at any time not exceeding three years from date, or, if thought more expedient, redeemable at any time after three years from date, and bearing interest not exceeding the rate of 4 3/4 per centum, payable in lawful money at maturity, or, at the discretion of the Secretary, semi-annually; and such of them as shall be made payable, principal and interest, at maturity, shall be a legal tender to the same extent as United States notes, for their face value, excluding interest, and may be paid to any creditor of the	Treasury notes	3 years.	3 years after date.	6 com int.	.....	\$17,250,000	.....
June 30, '64	.....	Treasury notes	3 years.	3 years after date.	6 com int.	Substitute red'd 5 % notes.	177,045,770	122,394,480 00
.....	.....	Treasury notes	3 years.	3 years after date.	6 com int.	.....	22,723,300	.....

STATEMENT OF THE INDEBTEDNESS OF THE UNITED STATES—(Continued.)

Acts of	Synopsis of Acts.	Title.	Length of term.	When redeemable.	Rate of interest.	Amount authorized.	Amount issued.	Amount outstanding.
June 29, '64.	United States, at their face value, excluding interest, or to purchase and willing to receive them at par, issuing interest-bearing and saving Treasury notes issued under the authority of this act may be made convertible, at the discretion of the Secretary of the Treasury, into any bonds issued under the authority of this act, and the Secretary may, in doing and causing to be cancelled and destroyed any Treasury notes or United States notes heretofore issued under authority of previous acts of Congress, and substitute in lieu thereof an equal amount of Treasury notes, such as are authorized by this act, or of other United States notes; nor shall any Treasury note bearing interest issued under this act be a legal tender in payment or redemption of any notes issued by any bank, banking association, or banker, circulated or intended to circulate as money.	7-30 Treasury 3 years notes.	3 years	3 years after Aug. 15, '64.	7 30 %	300,000,000	234,000,000	
Jan. 28, '65.	Whole amount may be issued in bonds or Treasury notes, at the discretion of the Secretary.							488,647,425 00
March 3, '65.	Authorized an issue of \$600,000,000 in bonds or Treasury notes; bonds may be made payable in any period not more than forty years from the date of issue, or may be made redeemable at the pleasure of the Government, at or after any period, not less than five years nor more than forty years from date, or may be made redeemable and payable as aforesaid, as may be expressed upon their face, and so much thereof as may be issued in Treasury notes may be made convertible into any bonds authorized by this act, and be of such denomination, not less than fifty dollars, and bear such date, and be made redeemable or payable at such periods as the Secretary of the Treasury may deem expedient. The interest on the bonds payable semi-annually; on the savings notes, annually, or annually, or at maturity thereof; and the principal or interest, or both, be made payable in coin or other lawful money; if in coin, not to exceed 6 percent per annum; when not payable in coin, but to exceed 7 1/2 per cent. per annum. Rate and character to be expressed on bonds or Treasury notes.	7 3/10 Treasury notes, three years, three issues.	3 yrs.	{ Aug. 14, '67 } { June 14, '98 } { July 14, '03 }	{ 7 3 } { 10 }	600,000,000		181,427,250 00
		Five-twenties 5 or 20 Oct. 31, 1876 p. e.	5 or 20 years.					

REPORT OF THE COMPTROLLER OF THE CURRENCY.

The Comptroller of the Currency presents a very interesting and elaborate report, but our limited space prevents our giving more than the following extracts:

Since the last annual report nine National banks have been organized, of which six are new associations, and three were organized to take the place of existing State banks, making the total number organized up to October one thousand six hundred and seventy-three.

The following table will exhibit the number of banks, with the amount of capital and circulation, in each State and Territory:

States and Territories.	Organization			Capital paid in.	Bonds on deposits.	Circulation issued.	In actual circulation
	Organized	Closing of	In opera-				
	State	bank	tion				
Maine.....	61	..	61	\$9,085,000 00	\$8,407,320	\$7,519,395	\$7,511,395
N. Hampshire.....	29	..	29	4,795,000 00	4,772,000	4,232,985	4,214,185
Vermont.....	40	..	40	6,510,012 80	6,474,000	5,722,780	5,710,499
Massachusetts.....	208	2	206	79,932,000 00	64,460,900	57,439,305	56,951,955
Rhode Island.....	62	..	62	20,804,800 00	14,188,600	12,608,970	12,470,220
Connecticut.....	83	1	82	94,584,220 00	19,740,000	17,556,585	17,422,885
New York.....	214	8	206	116,494,941 00	79,916,150	72,558,985	69,399,377
New Jersey.....	54	..	54	11,383,350 00	10,432,400	9,160,165	9,124,965
Pennsylvania.....	202	5	198	50,777,990 00	44,344,250	39,359,970	38,829,080
Maryland.....	22	..	22	12,590,302 60	10,065,750	8,960,000	8,894,900
Delaware.....	11	..	11	1,423,185 00	1,348,200	1,205,035	1,193,825
D. of Columbia.....	6	2	4	1,550,000 00	1,442,000	1,276,500	1,266,000
Virginia.....	20	1	19	2,500,000 00	2,425,800	2,149,980	2,146,660
West Virginia.....	15	..	15	2,216,400 00	2,243,250	1,994,750	1,982,568
Ohio.....	127	2	125	22,404,700 00	20,778,900	18,454,380	18,405,280
Indiana.....	71	2	69	12,897,000 00	12,594,250	11,042,240	11,015,040
Illinois.....	89	..	89	11,630,000 00	10,854,250	9,544,710	9,521,810
Michigan.....	42	..	42	5,070,010 00	4,357,700	3,825,125	3,822,425
Wisconsin.....	27	1	26	2,935,000 00	2,893,250	2,564,750	2,559,650
Iowa.....	47	2	45	2,962,000 00	2,709,150	2,227,705	2,220,000
Minnesota.....	15	1	14	1,060,000 00	1,682,200	1,486,000	1,477,500
Kansas.....	5	..	5	400,000 00	382,000	315,600	314,000
Missouri.....	19	2	17	7,559,800 00	4,074,100	2,519,490	2,497,690
Kentucky.....	15	..	15	2,835,000 00	2,660,000	2,246,970	2,242,000
Tennessee.....	12	1	11	2,100,000 00	1,536,550	1,222,040	1,222,040
Louisiana.....	2	1	2	1,900,000 00	1,408,000	1,245,100	1,240,000
Mississippi.....	2	..	2	150,000 00	75,000	66,000	66,000
Nebraska.....	2	..	2	250,000 00	190,000	170,000	170,000
Colorado.....	2	..	2	250,000 00	297,000	254,000	254,000
Georgia.....	9	1	8	1,700,000 90	1,383,500	1,224,000	1,224,000
N. Carolina.....	5	..	5	582,300 00	346,000	200,600	200,600
S. Carolina.....	2	..	2	588,000 00	170,000	153,000	153,000
Alabama.....	2	1	2	500,000 00	410,500	251,025	251,025
Nevada.....	1	..	1	135,000 00	155,000	121,700	121,700
Oregon.....	1	..	1	100,000 00	100,000	88,600	88,600
Texas.....	4	..	4	515,450 00	472,100	407,400	407,400
Arkansas.....	2	..	2	200,000 00	200,000	179,200	179,200
Utah.....	1	..	1	180,000 00	150,000	135,000	135,000
Montana.....	1	..	1	100,000 00	40,000	26,000	26,000
Idaho.....	1	..	1	100,000 00	75,000	42,900	42,900
Totals.....	1,673	341,620	1,642,394,861 00	\$240,975,600	\$203,968,971	\$209,102,986	

From the number of banks organized, heretofore stated to be sixteen hundred and seventy-three, should be deducted thirty-four, leaving the number in active operation sixteen hundred and thirty-nine.

The banks to be excluded are the following:

NEVER COMPLETED THEIR ORGANIZATION.

The First National Bank of Lansing, Mich.

The First National Bank of Penn Yan, N. Y.

The Second National Bank of Canton, Ohio.

The Second National Bank of Ottumwa, Iowa.

SUPERSEDED BY SUBSEQUENT ORGANIZATIONS WITH THE SAME TITLES.

The First National Bank of Norwich, Conn.

The First National Bank of Utica, N. Y.

IN THE HANDS OF RECEIVERS.

* The First National Bank of Attica, N. Y.
 The Venango National Bank of Franklin, Penn.
 The First National Bank of Washington, District of Columbia.
 Since Oct. 1, 1866 :
 The First National Bank of Medina, N. Y.
 The Tennessee National Bank of Memphis, Tenn.
 The First National Bank of Newton, Mass.
 The First National Bank of Selma, Ala.
 The First National Bank of New Orleans, La.
 The National Unadilla Bank of Unadilla, N. Y.
 The Farmers' and Citizens' National Bank of Brooklyn, N. Y.

IN VOLUNTARY LIQUIDATION.

Closed and Closing under the Provisions of Section 42 of the Act of June 8, 1864.

The First National Bank of Columbia, Mo.
 The First National Bank of Carondelet, Mo.
 The First National Bank of Leonardsville, N. Y.
 The National Union Bank of Rochester, N. Y.

Since Oct. 1, 1866 :

The First National Bank of Elkhart, Ind.
 The First National Bank of New Ulm, Minn.
 The Farmers' National Bank of Richmond, Va.
 The National Bank of the Metropolis, Washington, D. C.
 The Farmers' National Bank of Waukesha, Wis.
 The National Bank of Crawford County, Meadville, Penn.
 The City National Bank of Savannah, Ga.

Closed for the Purpose of Consolidation with Other Banks.

The Pittston National Bank of Pittston, Penn., consolidated with the First National Bank of Pittston, Penn.

The Berkshire National Bank of Adams, Mass., consolidated with the First National Bank of Adams, Mass.

The Fourth National Bank of Indianapolis, Ind., consolidated with the Citizens' National Bank of Indianapolis, Ind.

Since Oct. 1, 1866 :

The Kittanning National Bank of Kittanning, Penn., consolidated with the First National Bank of Kittanning, Penn.

The First National Bank of Providence, Penn., consolidated with the Second National Bank of Scranton, Penn.

The National State Bank of Dubuque, Iowa, consolidated with the First National Bank of Dubuque, Iowa.

The Ohio National Bank of Cincinnati, Ohio, consolidated with the Merchants' National Bank of Cincinnati, Ohio.

BANK FAILURES.

Since the organization of the first National Bank, which occurred June 20, 1863, up to Oct 1, 1867, a period of four years and three months, ten National Banking Associations have failed.

Their aggregate capital is.....	\$1,870,900
The aggregate liabilities to the public are :	
Circulation.....	\$1,187,900
† Deposits and other liabilities to the public.....	3,872,900
Total.....	\$4,560,100

* The First National Bank of Attica is now closed, its circulation paid in full, with a dividend to creditors of sixty cents on the dollar.

† Government deposits are not included in this item. The only loss to the Government will result from the failure of the Merchants' National Bank of Washington, which has been investigated by a Congressional Committee.

The circulation will be paid in full, so that the public will suffer no loss from that source, and the bonds deposited as security for the same would to-day realize a surplus of some \$250,000 that could be applied to the payment of general creditors. A careful estimate of the assets leads to the conclusion that they will realize a sum sufficient to pay 70 per cent. to creditors, leaving the total ultimate loss sustained by the public through their failure about \$1,000,000.*

The National Banks are not exempt from the disasters which are common to all banking institutions and business corporations. No system of banking, however perfect, can protect the stockholders or the depositors from sudden loss; neither can the most stringent legislation, nor the greatest degree of watchfulness and care on the part of this office, prevent violations of law and neglect of the fundamental principles of good banking.

The failures of National Banks which have thus far occurred, may in every instance be directly traced to the dishonesty or incompetency of bank officials, and the habitual violation of the plainest provisions of the law under which they were organized. In some cases old State banks, with capital impaired by bad debts, have been reorganized as National Banks, without sufficient scrutiny into their affairs, and such failures must be attributed to the old rather than the new system. The officers of these banks are prejudiced in favor of the State system of banking, and are not yet accustomed to the more stringent provisions of the National Currency Act. Such institutions will be liable to failure until their capital is restored by assessments, or they are forced into voluntary liquidation.

Yet, notwithstanding these things, if the failure of ten banks among the sixteen hundred and seventy three National Banks of the Union during the past four years had been three times greater, they would still in the aggregate not equal in magnitude the recent failure of the Royal Bank at Liverpool, or the Commercial Bank of Canada, institutions which were supposed to be conducted upon the most approved system of English banking.

QUARTERLY REPORTS.

Under existing provisions of law, banks are required to make a detailed statement of their affairs at the beginning of each quarter; and a statement showing the average of circulation, deposits, lawful money, and balances available for the redemption of their circulating notes, at the beginning of each month. This monthly statement is too vague and general to give any correct or reliable information as to the actual condition of the banks. A full and detailed report monthly would be of great value to the public, and would afford more constant insight into, and familiarity with, the management and condition of the banks, for the guidance of the Comptroller, than he can possibly obtain under the present system of quarterly reports.

It is known, understood and anticipated by all who have dealings with the banks, that they are in the habit of preparing systematically for making creditable exhibits on quarter day. It is certainly a point gained to know that the banks can make a good showing at least once every quarter; but it would be more satisfactory to know that they could do so at all times.

As an approximate to this, it is recommended that in lieu of the present quarterly reports and meagre monthly statements, a full exhibit of the affairs of each bank shall be required on the first Monday of each month.

REDEMPTIONS.

It is important to establish, as early as practicable, a system of redemptions which shall be comprehensive and thorough. The circulating notes of National Banks are uniform in design and appearance, and are equally well secured by the pledge of United States bonds. Their ultimate redemption is established beyond a question. It only remains to make them convertible. This can be done only by making them redeemable at a common centre, which should be the centre of trade.

When this is accomplished the amount of notes in circulation will be regulated strictly by the demand. When the volume is greater than is necessary to do the business of the country, the banks will be called upon to redeem the surplus, and it

* This estimate does not include amounts which may be recovered from stockholders on their personal liability.

will be retired. When trade is active, and more currency is required, the banks will expand their issues, and redemption will not be demanded until the season of activity is over. If all the banks are required to conform to a uniform standard of responsibility in this particular, the burden, being equally divided among all in proportion to their circulation, will be light, because the aggregate redemption at any given time will not exceed the surplus of notes in circulation; while, if such a rule is not established, the burden will be unequally divided, falling most heavily on those banks which conform to the highest standard, compelling them by the frequent return of their notes to contract their issues, while at the same time the remote banks will be tempted to undue expansion by the difficulty and expense of returning their notes for redemption. In this, as in all other cases, the inferior currency will be the more abundant.

Rigid, unfailing convertibility is the only safe rule, and, in the end, the most economical. It is an obligation which every National Bank owes to the system, to contribute its due share to the maintenance of a circulation of uniform value. This it can do only by keeping its own issues at par in the great centres of trade. Any plan which is not comprehensive, thorough, and rigid, will fail. Any half way, doubtful, voluntary arrangement will not answer the purpose. The Government, which authorizes the issue of bank notes for currency, has a right to require all banks to conform to the highest standard. The currency of a country belongs to the people; and the Government, which represents the people, should see to it that the people have the very best currency possible.

At present there is no immediate demand for the redemption of National Bank notes; but it would be one of the healthiest evidences of returning soundness in our financial affairs if it should be inaugurated. If legal tenders should command a small premium, it would begin. It would be the first step towards specie payments, to see a bank note accepted and treated as a promise to pay, and not the payment itself. It would mark an era in legal tender notes—the date of their appreciation in value. At the same time it would be a healthy reminder to the banks that their circulation is a liability payable on demand.

TAXATION.

It has come to be a recognized principle in all legislation on the subject of revenue, that all taxes imposed upon the manufacture of any article, are ultimately paid by the consumer. A tax upon any business is paid by the customer. It is so with banks. While they should bear their full and fair share of the burden of taxation, there is a point beyond which taxation becomes oppressive—greater than the profits of legitimate business will justify. Under the impression that they are realizing inordinate profits, there is a disposition to tax them in proportion to their supposed gains.

The Federal taxation amounts to an average of about two or two and a half per cent. upon the capital employed: while by an express provision in the act of Congress, the shares are taxable by State authority. This is done upon the par value of the shares, at rates ranging from two to five per cent., which, added to the Federal taxes, makes a total tax of from four to seven per cent. upon the capital of National Banks.

Heretofore, the high premium upon the gold received in payment of interest on their bonds, together with large deposits growing out of the abundance of paper money, has enabled them to pay this tax without reducing their dividends below the point of a fair interest on the capital invested. But it is becoming more and more difficult for the banks to pay their taxes and their expenses without reducing their profits below the amount that would be realized upon an investment in Government securities.

The natural effect of this excessive taxation will be an incentive to charge higher rates of interest in loaning their money; and in the end, the business community will pay the tax in the shape of usury. There is a very general and commendable disposition on the part of National Banks to assume their fair share of necessary taxation. They do not ask to be relieved from that, nor that any exception shall be made in their favor. But the fact is becoming evident in several of the States, that the tax imposed is in excess of their ability to pay consistently with legitimate profits to their stockholders.

BONDS HELD IN TRUST.

The following is a statement of bonds held by the Treasurer of the United States in trust for National Banks on the 30th day of September, 1867, according to the books of the Treasurer of the United States and the books of the office of the Comptroller of the Currency :

Description of Securities.	For security of Circulating Notes.
Registered bonds—Act of Jan. 28, 1847.....	\$30,000
Registered bonds—Act of March 21, 1848.....	23,000
Registered bonds—Act of June 14, 1865.....	1,055,000
Registered bonds—Act of June 22, 1865.....	181,000
Registered bonds—Act of Feb. 8, 1861.....	2,611,000
Coupon bonds—Act of Feb. 8, 1861.....	1,400
Coupon bonds—Act of March 2, 1861.....	43,250
Registered bonds—Acts of July 17 and Aug. 5, 1861.....	59,575,000
Coupon bonds—Acts of July 17 and Aug. 5, 1861.....	2,000
Registered bonds—Act of Feb. 25, 1863.....	60,700,450
Coupon bonds—Act of Feb. 25, 1863.....	40,200
Registered bonds—Act of March 3, 1863.....	36,201,550
Registered bonds—Act of March 3, 1864, 5 per cent.....	88,225,100
Coupon bonds—Act of March 3, 1864, 5 per cent.....	18,000
Registered bond—Act of June 30, 1864.....	50,014,750
Registered bonds—Act of July 1, 1862, and July 3, 1864.....	2,577,000
Registered bonds—Act of March 3, 1864, 6 per cent.....	2,528,500
Registered bonds—Act of March 3, 1865, first series.....	26,048,800
Registered bonds—Act of March 3, 1865, second series.....	10,312,500
Registered bonds—Act of March 3, 1865, third series.....	20,000
Total.....	\$240,675,000

PUBLIC DEBT OF THE UNITED STATES.

Abstract statement, as appears from the books and Treasurer's returns in the Treasury Department, on the 1st November and 1st December, 1867 :

DEBT BEARING COIN INTEREST.

	November 1.	December 1.	Increase.	Decrease.
5 percent. bonds.....	\$168,845,850 00	\$303,533,850 00	\$2,688,000 00	\$.....
6 " '67 & '68.....	14,690,841 80	14,690,841 80	.....	.....
6 " 1861.....	252,616,900 00	252,731,550 00	.....	915,650 00
6 " (6-20's).....	1,867,895,100 00	1,834,413,550 00	56,514,450 00	.....
Navy Pen. F'd 6 p.c.....	13,000,000 00	13,000,000 00	.....	.....
Total.....	1,778,110,591 80	1,840,867,591 80	62,756,000 00	.....

DEBT BEARING CURRENT INTEREST.

6 per ct. (RR) bonds.....	\$18,043,000 00	\$18,001,000 00	\$529,000 00	\$.....
2-yrs com. int. n'tes.....	63,558,940 00	63,342,860 00	.....	206,080 00
2-years 7-30 notes.....	234,607,700 00	228,537,100 00	.....	60,070,600 00
2 p. cent. certificates.....	11,560,000 00	12,855,000 00	1,295,000 00	.....
Total.....	426,768,640 00	373,292,460 00	.....	47,476,180 00

MATURED DEBT NOT PRESENTED FOR PAYMENT.

7-30 n. due Aug. 15, '67.....	\$2,371,100 00	\$2,385,400 00	\$.....	\$14,300 00
6 p. c. comp. int. n'tes.....	9,316,100 00	7,065,750 00	.....	2,250,350 00
B'ds of Texas ind'ty.....	262,000 00	260,000 00	.....	2,000 00
Treasury notes (old).....	168,661 64	168,011 64	.....	650 00
B'ds of Apr. 15, 1812.....	54,061 64	54,061 64	.....	.....
Treas. n's of M. & C. 53.....	868,940 00	868,940 00	.....	.....
Temporary loan.....	4,198,375 55	2,880,900 55	.....	1,317,475 00
Certif. of indebtedness.....	24,000 00	21,000 00	.....	3,000 00
Total.....	18,237,588 83	14,178,263 58	.....	4,059,325 00

DEBT BEARING NO INTEREST.

	November 1.	December 1.	Increase.	Decrease.
United States notes.....	\$357,164,944 00	\$356,212,475 00	\$.....	\$952,469 00
Fractional currency.....	30,708,428 89	30,929,981 05	221,552 06	.....
Gold cert. of deposit.....	14,514,400 00	18,401,400 00	3,887,000 00	.....
Total.....	402,387,772 89	405,543,856 05	3,156,073 06	.....

RECAPITULATION.

	\$	\$	\$	\$
Bearing coin interest.....	1,778,110.991 80	1,840,367,801 80	62,256,800 00	
Bearing cur'y interest.....	426,768,640 00	379,392,460 00		47,476 180 00
Matured debt.....	13,237,588 88	14,178,868 88		4,060,175 00
Bearing no interest.....	402,885,677 29	405,542,867 05	2,656,179 66	
Aggregate.....	2,625,502,848 02	2,639,362,573 68	13,879,724 66	
Coin & cur. in Treas.....	182,992,296 02	182,176,880 98	4,178,422 91	
Debt less coin and cur.....	2,491,504,450 00	2,501,305,751 75	9,701,301 75	

The following statement shows the amount of coin and currency separately at the dates in the foregoing table :

COIN AND CURRENCY IN TREASURY.

	November 1.	December 1.	Increase.	Decrease.
Coin.....	\$111,540,317 25	\$100,690,645 69	\$10,849,671 66	
Currency.....	22,458,090 67	37,486,175 24	15,028,084 57	
Total coin & cur'y.....	123,998,398 02	138,176,820 93	4,178,422 91	

The annual interest payable on the debt, as existing November 1 and December 1, 1867, (exclusive of interest on the compound interest notes) compares as follows :

ANNUAL INTEREST PAYABLE ON PUBLIC DEBT.

	Nov. 1.	Dec. 1	Increase.	Decrease.
Coin—5 per cents.....	\$9,942,367 50	\$10,379,642 40	\$437,275 00	
" " '87 & '68.....	881,456 51	881,456 51		
" " 1861.....	17,020,866 00	16,967,868 00		56,708 00
" " (5-30's).....	76,073,886 00	79,464,768 00	3,390,882 00	
" " N. P. F.....	780,000 00	780,000 00		
Total coin interest.....	\$107,698,306 01	\$108,366,745 01	\$668,439 00	
Currency—6 per cents.....	\$1,062,520 00	\$1,116,000 00	\$53,580 00	
" " 7.30 ".....	24,426,862 10	20,847,868 80		\$3,578,993 30
" " 3 ".....	846,800 00	886,650 00	39,850 00	
Total currency interest.....	\$25,855,682 10	\$22,849,568 80		\$3,006,113 30
Aggregate interest.....	130,553,988 11	130,716,313 81	162,425 70	

The aggregate condition of the debt on the first of each month of the current year is shown in the following summary :

1867.	Paying coin interest.	Pay'g cur'y interest.	Matured debt.	Not bearing interest.	Total debt.
January.....	\$1,400,490,743	\$223,379,440	\$16,506,580	\$426,078,364	\$2,075,062,505
February.....	1,420,145,512	219,072,740	15,291,454	430,163,804	2,085,773,510
March.....	1,464,865,192	787,036,880	14,576,687	424,198,598	2,690,557,259
April.....	1,469,381,592	734,180,780	12,285,618	417,225,844	2,693,713,374
May.....	1,541,203,312	697,115,710	11,932,540	413,622,506	2,662,853,069
June.....	1,602,643,942	655,691,765	9,712,090	412,991,792	2,680,040,519
July.....	1,627,890,612	635,803,905	8,997,396	419,507,072	2,692,299,215
August.....	1,673,906,692	574,964,526	15,636,816	417,177,532	2,682,685,566
September.....	1,718,627,742	495,971,635	19,440,376	410,019,717	2,644,119,464
October.....	1,745,196,142	461,074,680	18,231,267	405,897,377	2,630,399,466
November.....	1,778,110,999	426,768,640	18,237,589	402,885,677	2,625,502,848
December.....	1,840,367,812	379,392,460	14,178,364	405,542,867	2,639,382,573

The following summary presents an exhibit of the total debt, the amount of coin and currency in the Treasury, and the debt less cash in hand at the dates respectively :

1867.	Total debt.	Coin.	Currency.	Total.	Debt less Cash.
January.....	\$2,075,062,505	\$97,941,963	\$21,395,765	\$121,787,833	\$1,953,274,672
February.....	2,085,773,510	97,354,604	45,069,517	142,424,791	1,943,348,719
March.....	2,690,557,259	107,971,081	52,253,268	159,822,269	2,530,735,000
April.....	2,693,713,374	105,956,477	31,323,827	140,280,304	2,553,433,070
May.....	2,662,853,069	114,220,444	33,838,568	148,059,012	2,514,794,057
June.....	2,680,040,519	96,798,417	72,696,165	170,494,582	2,509,545,937
July.....	2,692,299,215	106,419,686	71,970,564	180,99,202	2,511,300,013
August.....	2,682,685,566	102,905,174	72,474,296	175,379,470	2,507,306,096
September.....	2,644,119,464	101,863,080	47,073,074	148,936,093	2,500,183,371
October.....	2,630,399,466	108,298,661	31,813,249	137,112,000	2,493,287,466
November.....	2,625,502,848	111,540,317	22,458,081	133,998,398	2,491,504,450
December.....	2,639,382,573	100,690,646	37,486,175	138,176,821	2,501,205,752

DEBT OF BROOKLYN CITY.

The funded debt as ascertained from the comptroller's books by a committee of the Joint Board of Aldermen and Supervisors, is reported to have amounted on the 2d July, 1867, to \$12,361,919 92, at which date the Sinking Fund and other means on hand applicable for the discharge of this indebtedness amounted to \$1,213,040 61, which being deducted leaves the net indebtedness at \$11,147,869 31. With little exception this debt has been made on account of the city waterworks, the new park and other important improvements all tending to add to the taxable value of property within the city limits. The following list describes the several issues and the amounts now outstanding :

DESCRIPTION.	Rate p.c.	When issued.	Date of Maturity.	Amount out-standing.
City Hall Loan.....	6	1846	Jan. 1, '68-'70	\$20,000 00
Washington Park Loan.....	6	1848	" 1, 1869	121,540 42
City Hall Loan.....	6	1849	" '72-'76	50,000 00
do. do.....	6	1860	" 1875	15,000 00
Water Loan.....	6	1863	" 1873	65,000 00
Debt of Williamsburgh Loan.....	6	1865	" 1875	150,000 00
Current Expenses Loan.....	6	1861	" 1871	150,000 00
Williamsburg City & Village B'ds.....	6	var.	var. '68-'70	10,379 50
Mount Prospect Square.....	6	1856	Jan. 1, 1867	80,000 00
Williamsburgh Streets Liabilities Loan.....	6	1867	" 1873	92,000 00
Williamsburg Local Improvement Loan.....	6	1869	" 1879	100,000 00
Deficiency Loan.....	7	1861	Nov. 1, 1866	6,000 00
Third Street Improvement Loan.....	6	1861	July 1, 1861	167,000 00
War Loan.....	6	1863	Jan. 1, 1869	115,000 00
Atlantic ave. Improvement Loan.....	6	1863	Dec. 31, 1871	115,000 00
Fourth ave. Improvement Loan.....	6	1861	July 1, '62-'65	250,000 00
Williamsburg Local Improvement Loan.....	6	1861	" 1881	88,000 00
National Guard & Volunteer Firemen Loan.....	7	1864	Jan. 1, 1881	27,000 00
Holders' Aid Fund Bonds.....	7	1863	" '85-'94	552,000 00
Public Park Loan.....	6	1864	" 1914	1,217,000 00
do. do.....	7	1866	" 1916	1,814,440 00
Brunswick Avenue Loan.....	7	1866	July 1, '71-'90	222,000 00
South 8 th Avenue Street Loan.....	7	1866	" '71-'90	322,000 00
Atlantic Avenue Extension Loan.....	7	1866	" 1869	2,000 00
National Guard Bonds Loan.....	6	1863	Jan. 1, 1873	22,000 00
Go. a's Canal Improvement L'n.....	7	1864	" '68-'86	147,000 00
Water Loan.....	7	'66-'80	July 1, '81-'91	6,466,000 00

Total indebtedness of the city..... \$12,311,919 92
Sinking Fund, &c..... 1,213,040 61

Actual indebtedness, July 2, 1867..... \$11,147,869 31

The following table will more clearly define the nature of the aggregate debt :

Bonds issued for water works.....	\$1,465,000 00	
" " Parks.....	3,242,540 42	
" " City hall.....	150,000 00	
" " Street improvements.....	1,325,000 00	\$11,182,540 42
Bonds issued for current expenses.....	\$443,379 50	
" " Bounties, &c.....	736,000 00	1,179,379 50
Total indebtedness as above.....		\$12,361,919 92

Of the above debt the sum of \$2,785,919 92 pays interest at the rate of 6 per cent., and \$9,576,000 00 at the rate of 7 per cent. It will, however, be seen that most of the principal and interest is only nominally payable by the city; the water debt is already, or soon will be, self-sustaining, and the debts for street improvements will be paid from local assessments. The real debts chargeable on the city are those for parks, the city hall, bounties and current expenses, in all \$4,571,919 92. This shows that Brooklyn, with its 300,000 inhabitants, has little reason to complain of heavy burdens. We have under preparation a full analysis of the finances of the city for several years, which will appear in the *MAGAZINE* at an early day.

OUR LATE MINING ENTERPRISES.

In 1864 Wall street was in a furor of excitement respecting mining enterprises. Colorado, Nevada and Idaho were declared to be underlaid with gold and silver; and the Lake Superior region was heralded as surpassingly rich, not only in iron and copper ore, but even in silver also. Capitalists made pilgrimages to these far off El Dorados, and returned with the most glowing accounts of rich lodes, and of untold wealth within the easy reach of organized enterprise. These representations received a certain degree of countenance from the operations of a few mines in the localities, which certainly then appeared to be realising a handsome product. Large tracts of "gold lands" were bought up by Eastern speculators; and companies were organized, to which these lands were sold at fabulous prices. The nominal capital of the mining companies formed during twelve months of this excitement amounted to some hundreds of millions. The shares were put afloat at a slight per centage upon the par value, and were eagerly taken up by the credulous public, upon the supposition that when the mines were "worked" their stock would rapidly rise in value.

We call attention to these reminiscences merely to ask what has become of these mining enterprises? The silence as to their operations is ominous. For a long time, we were told that the companies were waiting to satisfy themselves as to the best appliances for separating the ores, a variety of new processes being then introduced. This excuse for inactivity has lost its force by the sheer lapse of time. The Colorado Companies now tell us that they are waiting for the opening of the Pacific railroad to their vicinity, as affording cheaper transportation and lowering the costs of labor. How much this excuse will prove to be worth remains to be seen. The fact, however, remains that of the companies formed during the excitement of three or four years ago, not one in twenty is actually operating its property; and perhaps not more than that proportion has really the capital requisite for working purposes. As to the stocks, they are, with a few exceptions, utterly worthless. For a time, few of the companies were represented in the New York Mining Board, and their stocks served well the functions of speculative foot balls; but now the Mining Board is forsaken, the brokers are seeking new employments and the stocks are scarcely heard of. We have no doubt that there are exceptional cases in which these companies have properties of value, and which, if well worked, would pay a reasonable profit. But as to a large majority of them, they are practically swindles, and were established in the first instance more for the purpose of securing a market for lands bought by unprincipled speculators than as forming the basis of a profitable enterprise. There can be little doubt that there is a large amount of gold in Colorado, and of silver in Nevada and of copper in Michigan; but these ores can never be raised profitably except by an ampler capital and a riper experience than have been associated with the lately formed companies. Perhaps some day ere long, capital and experience, well allied, may take up the debris of some of the best of these wrecks, and thereupon found a permanent and profitable interest.

AMERICAN FOOTHOLDS IN CHINA.

We have repeatedly urged the importance to American interests in China of obtaining concessions of territory sufficient for commercial purposes and for the convenience of our steam marine and war ships. Other nations have secured such concessions, and derive great advantages therefrom, and this fact might with much force be urged as a reason why the United States alone should not be compelled to rely upon mere leases for the facilities her commerce demands. This subject will be one of the points urged when the revision of the treaties with China comes up in 1863, and there are some intimations that it has already had the attention of our Government. The statement is explicitly made by Eastern journals that the Government is now negotiating for the purchase or cession of Woosung, which is said to be a flat neck of land at the junction of the Whangpo and Yang-tze-Kiang rivers, presumably not far from Shanghai. The American commercial and naval station in China could not be better located than near the mouth of the Yang-tze-Kiang, which is the Amazon of China, and the artery of its greatest commerce, flowing past numerous large cities, through a fertile and populous valley, and already traversed by a fine American fleet of steamers, which connect with a line of ocean steamers sailing from Shanghai and Hong Kong to Japan and California. It is one of the plainest dictates of commercial interest that we should have near the outlet of the Yang-tze-Kiang a piece of land we can call our own, on which American citizens can establish agencies under the protection of their own police, and where they can build and live free from the restrictions that now embarrass them. England obtained such concessions by force. The United States, which have no schemes of foreign conquest, and enjoy the friendship and confidence of the Chinese in an eminent degree, could reasonably ask them on the score of justice and comity.—*San Francisco Bulletin*.

TAXABLE PROPERTY IN SAN FRANCISCO.

The annual tax-roll for this year aggregates the value of taxable real estate in San Francisco, city and county, at \$57,880,468; of personal property, \$28,556,806—total so far, \$86,437,274. The figures for 1865-'66 were: Real estate, \$49,137,812; personal property, \$39,129,145—total, \$88,266,457. This shows an apparent falling off of \$1,823,823, but there is a supplemental assessment roll of personal property yet to be handed in by the Assessor. This will contain, principally, a list of mortgagees, and the gross amount of the enumeration will very nearly equal \$17,000,000. This sum added to the personal property already listed gives a total under that head of \$45,556,806, being an increase in the amount of personal property for 1865-'66 of \$6,427,661, while in real estate the increased valuation over that of last year is \$8,743,156. Assuming that the amount of the supplemental roll is not over estimated—and the figures are given on the authority of a gentleman intimately connected with the municipal finances—there will be an aggregate increase in the valuation of real and personal property and improvements for 1863-'67 of \$15,170,817.

COMMERCIAL CHRONICLE AND REVIEW.

Decline in Prices—Monetary Affairs—Rates of Loans and Discounts—Volume of Shares at the Stock Boards—Bonds sold at New York Stock Exchange Board—Course of Consols and American Securities at London—Prices of Government Securities at New York—Prices of Compound Interest Notes at New York—Closing quotations at Regular Board—Receipts and Shipments of Coin and Bullion at New York—Movement of Coin and Bullion at New York—Course Gold at New York—Course of Foreign Exchange at New York.

The general trade of the city showed a partial improvement during November. The previous general decline in prices and the protracted abstinence from buying, induced a moderate assorting demand for goods from all parts of the country, and especially from the West; merchants, therefore, have been enabled to sell down their Fall stocks to a conservative limit, although, as a rule, at unsatisfactory prices. The result of the season's wholesale trade, in nearly every class of merchandise, has been discouraging. Heavy losses have been incurred through the fall in values; and though not to an extent to cause general embarrassment, yet resulting in much caution in credits and a disposition to curtail operations. The importing interest has sustained its full share of injury. The importations have been much below those for the Fall season of last year, yet they have proved to be in excess of the wants of the people, and consequently a large amount of goods has had to be sold at a heavy discount from cost. The losses among the importers of groceries have been especially severe, and several firms of long standing have failed.

Monetary affairs have continued in an unsettled condition, although steadier than in October. The funds taken West, earlier in the season, for moving the grain crops, have been partially returned; but most of the currency thus received from Chicago has been sent to Cincinnati for the purchase of the hog crop, or to the South in payment for cotton. The cotton movement, however, has been much more moderate than was expected. The receipts at the ports have been, until lately, below those for the corresponding period of last year, notwithstanding that the crop is larger, a fact due, perhaps, principally to sickness in the extreme Southern States but in part, also, to the declining tendency of the Liverpool market and to the expectation that Congress would promptly repeal the cotton tax. Owing to this light movement and to the low price of the staple the amount of funds required for moving the crop has been much less than was expected. Demand loans have been comparatively easy, with the exception of a few days of artificial stringency; but the full legal rates has generally prevailed. The discount market has continued very active and stringent. It appears to have been one of the effects of currency contraction to induce a freer use of mercantile credits; and the banks, not having anticipated the change, have been only partially able to meet the demand for discounts, while private discounters, alarmed at the losses of merchants and the frequency of failures, have been little disposed to buy paper. Under these circumstances, really prime notes have not been negotiable, outside the banks, at better than 7½@10 per cent.

Business in Wall-street has been dull, and very unsatisfactory to brokers. The public have little surplus for investment in securities or for employment in speculative ventures, but are rather sellers of stocks and bonds; and this absence of commission orders has driven the dealers into speculations on their own account, a condition of the stock market always unsatisfactory. The total transactions at both the regular and public boards for the month, amount to 1,359,168 shares, against 2,339,043 shares for the same month of 1866. Prices have been generally sustained by the operations of strong combinations upon a few leading stocks, without which support values must have fallen heavily.

The lowest and highest quotations for U. S. 6's (5-20 years) of 1862 at Frankfort in the weeks ending Thursday, have been as follows :

	Nov. 7. 76 5-16	Nov. 14. 75%	Nov. 21. 76 1-16	Nov. 28. 75%
Frankfort.....				

United States securities have sympathized with the general dulness in the stock market, and the leading bonds were about $\frac{1}{4}$ per cent. lower at the close of the month than at the opening, notwithstanding the accumulation of interest during the interim, being equal to about $\frac{1}{4}$ per cent. Ten-Forties, however, owing to a foreign demand, have advanced about $1\frac{1}{4}$ per cent. The decline is principally due to the fall in the price of gold, without a corresponding advance in Five-Twenties abroad; and perhaps partially also to a falling off in the regular investment demand. The total sales of United States bonds and Treasury notes at the Stock Exchange for the month amount to \$11,500,000.

The daily closing prices of the principal Government securities at the New York Stock Exchange Board, as represented by the latest sale officially reported, are shown in the following statement :

PRICES OF GOVERNMENT SECURITIES AT NEW YORK, NOVEMBER, 1867.

Day of month.	6's, 1881.	6's, (5-20 yrs.)	Coupon	new.	1867, yrs. 10-40	2d ar.
Friday 1.....	112%	111%	103%	105%	107%	107%
Saturday 2.....	112%	111%	103%	105%	107%	107%
Sunday 3.....						
Monday 4.....	112%		103%	105%	107%	107%
Tuesday 5.....	112%		103%	105%	107%	107%
Wednesday 6.....	112%		103%	105%	107%	107%
Thursday 7.....			103%	105%	107%	107%
Friday 8.....			103%	105%	107%	107%
Saturday 9.....	112%	111%	103%	105%	107%	107%
Sunday 10.....						
Monday 11.....			103%	105%	107%	107%
Tuesday 12.....	112%	111%	103%	105%	107%	107%
Wednesday 13.....	112%	111%	103%	105%	107%	107%
Thursday 14.....	112%	111%	103%	105%	107%	107%
Friday 15.....	112%		103%	105%	107%	107%
Saturday 16.....	112%		103%	105%	107%	107%
Sunday 17.....						
Monday 18.....	112%		103%	105%	107%	107%
Tuesday 19.....	112%	111%	103%	105%	107%	107%
Wednesday 20.....	112%	111%	103%	105%	107%	107%
Thursday 21.....	112%	111%	103%	105%	107%	107%
Friday 22.....	112%		103%	105%	107%	107%
Saturday 23.....	112%		103%	105%	107%	107%
Sunday 24.....						
Monday 25.....			103%	105%	107%	107%
Tuesday 26.....	112%		103%	105%	107%	107%
Wednesday 27.....	112%		103%	105%	107%	107%
Thursday 28.....						
Friday 29.....			103%	105%	107%	107%
Saturday 30.....	112%		103%	105%	107%	107%
First.....	112%	111%	103%	105%	107%	107%
Lowest.....	112%	111%	103%	105%	107%	107%
Highest.....	112%	111%	103%	105%	107%	107%
Range.....	1%	1%	0%	0%	0%	0%
Last.....	112%	111%	103%	105%	107%	107%

The quotations for Three-years' Compound Interest Notes on each Thursday of the month have been as shown in the following statement :

PRICES OF COMPOUND INTEREST NOTES AT NEW YORK, NOVEMBER, 1867.

Issue of	Nov. 7.	Nov. 14.	Nov. 21.	Nov. 28.
December, '64.....	119% @ 119%	119% @ 119%	119% @ 119%	119% @ 119%
May, 1865.....	117% @ 117%	117% @ 117%	117% @ 117%	117% @ 117%
August, 1865.....	116% @ 116%	116% @ 116%	116% @ 116%	116% @ 116%
September, '65.....	116% @ 116%	116% @ 116%	116% @ 116%	116% @ 116%
October, 1865.....	116% @ 116%	116% @ 116%	116% @ 116%	116% @ 116%

The first series of figures represents the buying and the last the selling prices at first class brokers' offices.

The following are the closing quotations at the regular board's, Friday of the last seven weeks.

	Nov. 1.	Nov. 8.	Nov. 15.	Nov. 22.	Nov. 29.	Dec. 6.	Dec. 13.
Cumberland Coal	34%	34%	....	27%	....	....	27
Quicksilver	18%	16%	16%	16%	15	16%	11
Canton Co.	43%	40%	45%	....	45%	44%	....
Mariposa pref. ....	....	....	....	....	....	....	15
New York Central	113%	113%	113%	118%	118%	114%	115%
Erie	73	73%	73%	71%	71%	71%	75%
Hudson River	125%	125	126%	123%	126%	126%	122%
Reading	27	26%	26	26%	25%	25%	26
Michigan Southern	78%	79	81%	86	80	80%	86
Michigan Central .....	....	109	....	....	....	110	....
Cleveland and Pittsburgh .....	....	81%	84%	....	86%	82	84
Cleveland and Toledo	104%	102%	102%	....	102%	102%	100%
Northwestern	47%	48	53	57%	56	56%	58%
preferred	65%	63%	65%	64%	67%	66%	67
Rock Island	96	96%	96%	96	96	96%	97
Fort Wayne	96%	96%	96%	97%	97%	97%	97%
Illinois Central	126%	126%	126	....	121	126	....
Ohio and Mississippi .....	....	....	....	....	....	....	26

The receipts and shipments of coin and bullion at New York in the three first quarters, and in the month November, with the total since January 1, have been as shown in the following statement :

RECEIPTS AND SHIPMENTS OF COIN AND BULLION AT NEW YORK.

	First quarter.	Second quarter.	Third quarter.	Month of November.	Since Jan. 1.
Rec'pts f'm California.....	\$6,109,861	\$8,899,555	\$9,940,679	\$512,855	\$25,112,894
Imp'ts f'm for'gn ports.....	408,077	1,147,619	942,519	181,219	3,682,285
Total receipts	\$6,518,938	\$10,047,174	\$10,883,198	\$694,074	\$28,195,179
Exp'ts to foreign ports.....	6,666,968	18,028,709	17,425,445	1,732,261	44,947,693
Excess of exports.....	\$42,030	\$9,981,535	\$7,542,247	\$1,038,087	\$16,802,945
Excess of receipts.....	....	....	....	....	....

The following statement shows the receipts and exports in November and since January 1, for seven years :

	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.
Rec'pts.....	\$512,855	\$25,103,234	\$181,319	\$3,042,238	\$1,732,261	2,754,090	2,046,190	7,307,064	5,483,363
Exp'ts.....	1,669,891	27,103,709	802,937	9,235,985	1,732,261	2,754,090	2,046,190	7,307,064	5,483,363
Imp'ts.....	1,253,675	18,185,608	226,536	1,998,237	181,219	2,046,190	2,046,190	7,307,064	5,483,363
Exp'ts.....	889,976	10,702,124	161,737	2,180,646	1,732,261	2,046,190	2,046,190	7,307,064	5,483,363
Exp'ts.....	713,091	11,349,639	103,144	1,400,818	1,732,261	2,046,190	2,046,190	7,307,064	5,483,363
Exp'ts.....	2,651,211	23,644,160	109,708	3,111,961	6,212,251	43,835	....	....	....
Exp'ts.....	2,594,948	21,801,560	109,708	3,111,961	6,212,251	43,835	....	....	....

The following formula furnishes the details of the general movement of coin and bullion at the port for the past three quarters and the month of November, and since January 1 :

GENERAL MOVEMENT OF COIN AND BULLION AT NEW YORK.

	1st quarter.	2d quarter.	3d quarter.	Nov.	Since Jan. 1.
Rec's from California.....	\$6,109,861	\$8,899,555	\$9,940,679	\$512,855	\$25,112,894
Imp's f'm for'gn ports.....	408,077	1,147,619	942,519	181,219	3,682,285
Coin int'at p'd by U.S.....	10,698,208	17,798,086	19,644,897	18,902,614	66,622,595
Total rep'd sup'y.....	\$17,857,941	\$26,845,260	\$29,827,505	\$17,663,688	\$93,972,125
Exp'ts to for'gn ports.....	\$6,508,968	\$18,028,709	\$17,425,445	\$1,732,261	\$44,947,693
Cust'ns d't'd	\$2,170,828	\$7,185,886	\$4,608,908	7,304,964	111,110,486
Total withdrawn.....	\$8,679,796	\$25,214,595	\$22,034,353	\$9,037,225	\$156,057,977
Excess of rep'd sup'y.....	\$.....	\$.....	\$.....	\$.....	\$.....
Excess of withdraw's.....	\$2,380,845	\$19,874,366	\$22,874,519	\$.....	\$2,772,289
Bank specie increas'd.....	.....	.....	1,737,167	10,411,736	2,397,086
Bank specie decreas'd.....	4,662,613	753,613	.....	260,564	.....

Deficit in reported supply, made up from unreported sources..... \$17,717,723 \$18,620,723 \$24,001,956 \$1,625,999 \$66,108,233

The course of the gold premium has been steadily downward ; the price having opened at 141½ and closed at 138, with a strong declining tendency. The market appears to have been subject to a strong reaction from the upward excitement caused by the threatening aspect of European politics and the relations

between Congress and the Executive. At the same time, about \$25,000,000 of coin interest became payable on the 1st ult. by the Treasury; while on the first of January nearly \$30,000,000 of gold becomes due to the public creditors. The assembling of Congress has dissipated much of the apprehension that measures of inflation would be adopted, and has encouraged the expectation of a generally conservative course of legislation upon financial questions. These appear to have been the principal influences tending to lower the premium. The receipts of treasure from California have been unusually light, being only \$513,000 against \$1,669,000 for the same month of last year. This may be due partially to shipments of treasure having been made to the East from San Francisco on New York account since the opening of steam communication with Hong Kong, but it is probably principally attributable to the shipments of California wheat and flour to New York having contributed so largely to liquidate the indebtedness of California to this city. The statement which follows shows the daily fluctuations in the price of American gold coin at the Gold Room during the month of November:

COURSE OF GOLD AT NEW YORK—NOVEMBER, 1867.

Date.	Open'g	Lowest	Highest	Closing	Date.	Open'g	Lowest	Highest	Closing
Friday.....	1 140%	140%	140%	140%	Thursday.....	21 1-9%	139%	139%	139%
Saturday.....	2 141%	140%	141%	140%	Friday.....	22 139%	139%	139%	139%
Sunday.....	3 141%	140%	141%	140%	Saturday.....	23 139%	139%	140%	140%
Monday.....	4 140%	139%	141%	140%	Sunday.....	24 139%	139%	140%	140%
Tuesday.....	5 140%	139%	140%	140%	Monday.....	25 140%	139%	140%	140%
Wednesday.....	6 138%	138%	139%	138%	Tuesday.....	26 139%	139%	140%	139%
Thursday.....	7 138%	138%	139%	138%	Wednesday.....	27 139%	139%	139%	139%
Friday.....	8 138%	138%	139%	138%	Thursday.....	28 (Thanksgiving)			
Saturday.....	9 139%	138%	139%	138%	Friday.....	29 139%	138%	139%	139%
Sunday.....	10 138%	138%	139%	138%	Saturday.....	30 138%	137%	138%	138%
Monday.....	11 138%	138%	139%	138%	Oct. ... 1867.....	140%	137%	141%	138%
Tuesday.....	12 139%	139%	139%	139%	" 1866.....	146%	138%	148%	141%
Wednesday.....	13 139%	139%	140%	140%	" 1865.....	143%	145%	148%	147%
Thursday.....	14 140%	139%	140%	140%	" 1864.....	238%	210%	290%	230%
Friday.....	15 141%	140%	141%	140%	" 1863.....	146%	143%	154%	148%
Saturday.....	16 140%	139%	140%	139%	" 1862.....	129%	129%	133%	129%
Sunday.....	17 139%	139%	140%	139%	" 1861.....	100%	100%	100%	100%
Monday.....	18 139%	139%	140%	139%	See Jan. 1, 1867.....	122%	132%	146%	138%
Tuesday.....	19 139%	139%	139%	139%					
Wednesday.....	20 139%	139%	140%	139%					

The amount of specie in the banks at the opening and close of the above quarters, months, &c. was as follows:

At Opening.....	\$13,185,223	\$8,522,600	\$7,768,996	\$6,161,164	\$13,185,223
At close.....	8,522,600	7,768,996	9,496,163	10,411,726	16,572,800
Increase at close.....	\$ 4,662,613	753,618	\$1,727,167	\$10,350,562	\$3,387,668
Decrease at close.....					

As usual at this period of the year the transactions in foreign exchange have been very moderate. There has been a marked deficiency in the supply of cotton acceptances, and bills of that class have been very difficult of negotiation. The liberal shipments of breadstuffs and provisions have, however, kept the market supplied with bills fully up to the demand, and rates closed a little below the opening figures. The following table shows the course of Foreign Exchange, daily, for the month of November:

COURSE OF FOREIGN EXCHANGE (60 DAYS) AT NEW YORK—NOVEMBER.

Days.	London. cents for 54 pence.	Paris. centimes for dollar.	Amsterdam. cents for florin.	Bremen. cents for rix daler.	Hamburg. cents for M. banco.	Berlin. cents for thaler.
1.....	109% @ 109%	516% @ 515%	40% @ 41	78% @ 78%	35% @ 36	71% @ 72
2.....	109% @ 109%	516% @ 515%	40% @ 41	78% @ 78%	35% @ 36	71% @ 72
3.....						
4.....	109% @ 109%	515 @ 513%	41 @ 41%	78% @ 79	36 @ 36%	72 @ 72%
5.....	109% @ 109%	515 @ 513%	41 @ 41%	78% @ 79	36 @ 36%	72 @ 72%
6.....	109% @ 110%	515 @ 513%	41 @ 41%	78% @ 79	36 @ 36%	72 @ 72%
7.....	109% @ 109%	517% @ 516%	41 @ 41%	78% @ 79	36 @ 36%	72 @ 72%
8.....	109% @ 109%	517% @ 514%	40% @ 41	78% @ 78%	35% @ 36	71% @ 72
9.....	109% @ 109%	517% @ 516%	40% @ 41	78% @ 78%	35% @ 36	71% @ 72

Days.	London.	Paris.	Amsterdam.	Bremen.	Hamburg.	Berth.
10.						
11.	109 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
12.	109 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
13.	109 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
14.	109 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
15.	109 1/2 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
16.	109 1/2 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
17.						
18.	109 1/2 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
19.	109 1/2 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
20.	109 1/2 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
21.	109 1/2 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
22.	109 1/2 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
23.	109 1/2 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
24.						
25.	109 1/2 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
26.	109 1/2 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
27.	109 1/2 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
28.						
29.	109 1/2 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
30.	109 1/2 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41	78 1/2 @ 78 1/2	85 1/2 @ 86	71 1/2 @ 72
Thanksgiving.						
Nov.	109 @ 109 1/2	517 1/2 @ 518 1/2	40 1/2 @ 41 1/2	78 1/2 @ 79	85 1/2 @ 86 1/2	71 1/2 @ 72 1/2
Oct.	108 1/2 @ 109 1/2	531 1/2 @ 515	40 1/2 @ 41 1/2	78 1/2 @ 79	85 1/2 @ 86 1/2	71 1/2 @ 72 1/2
Nov.	109 @ 110	531 1/2 @ 515	40 1/2 @ 41 1/2	78 1/2 @ 79	85 1/2 @ 86 1/2	71 1/2 @ 72 1/2
Aug.	109 1/2 @ 110 1/2	518 1/2 @ 519 1/2	40 1/2 @ 41 1/2	78 1/2 @ 79 1/2	85 1/2 @ 86 1/2	71 1/2 @ 72 1/2
J'ly.	109 1/2 @ 110 1/2	517 1/2 @ 511 1/2	40 1/2 @ 41 1/2	78 1/2 @ 79 1/2	85 1/2 @ 86 1/2	71 1/2 @ 72 1/2
Jun.	109 1/2 @ 110 1/2	518 1/2 @ 511 1/2	40 1/2 @ 41 1/2	78 1/2 @ 79 1/2	85 1/2 @ 86 1/2	71 1/2 @ 72 1/2
May.	109 1/2 @ 110 1/2	530 @ 510	40 1/2 @ 41 1/2	78 1/2 @ 80	85 1/2 @ 86 1/2	71 1/2 @ 72 1/2
Apr.	108 1/2 @ 110 1/2	523 1/2 @ 519 1/2	40 1/2 @ 41 1/2	78 1/2 @ 79 1/2	85 1/2 @ 86 1/2	71 1/2 @ 72 1/2
Mar.	108 @ 110 1/2	535 @ 515	40 1/2 @ 41 1/2	78 1/2 @ 79 1/2	85 1/2 @ 86 1/2	71 1/2 @ 72 1/2
Feb.	108 1/2 @ 110 1/2	533 1/2 @ 515	40 1/2 @ 41 1/2	78 1/2 @ 79 1/2	85 1/2 @ 86 1/2	71 1/2 @ 72 1/2
Jan.	108 1/2 @ 109 1/2	530 @ 513 1/2	41 1/2 @ 41 1/2	78 1/2 @ 79 1/2	85 1/2 @ 86 1/2	71 1/2 @ 72 1/2

Since Jan 1.... 108 @ 110 1/2 525 @ 510 40 1/2 @ 41 1/2 78 @ 80 85 1/2 @ 86 1/2 71 1/2 @ 72 1/2

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

Returns of the New York, Philadelphia and Boston Banks.

Below we give the returns of the Banks of the three cities since Jan. 1 :

NEW YORK CITY BANK RETURNS.

Date.	Loans.	Specie.	Circulation.	Deposits.	Legal Tend's.	Ag. clear'gs.
January 5.	\$387,852,460	12,794,892	32,762,779	302,532,564	55,026,121	426,987,767
January 12.	358,995,488	14,613,477	32,521,108	302,517,686	63,944,370	905,173,006
January 19.	355,032,233	15,365,297	32,854,928	301,560,115	63,236,899	530,040,046
January 26.	251,874,801	16,014,007	32,957,198	297,953,076	63,436,059	568,822,804
February 3.	261,264,265	16,332,98	34,295,347	300,511,596	65,944,541	612,447,512
February 9.	250,268,925	16,157,257	32,777,00	198,341,835	67,693,999	508,826,533
February 16.	253,131,338	14,79,628	32,956,309	196,072,299	64,642,940	455,832,289
February 23.	257,832,994	14,613,458	33,006,141	198,420,347	62,153,896	443,574,096
March 2.	26,166,486	11,579,881	33,994,483	198,014,914	61,014,195	467,534,629
March 9.	242,114,458	10,563,128	35,409,811	300,932,837	64,523,440	544,172,266
March 16.	263,029,274	9,968,723	34,406,683	197,958,104	63,813,079	494,555,19
March 23.	259,400,315	9,433,913	33,519,401	19,875,615	60,904,958	473,083,76
March 30.	255,84,884	7,524,69	33,649,195	189,481,250	62,459,811	459,864,603
April 6.	254,470,027	8,133,813	33,774,573	183,861,249	59,021,775	531,835,194
April 13.	254,102,178	8,856,299	33,702,047	182,861,286	60,201,515	523,252,463
April 20.	247,561,781	7,692,583	33,648,571	184,090,256	64,096,916	447,614,373
April 27.	247,737,381	7,404,304	33,601,285	187,674,341	67,930,851	446,494,222
May 4.	247,371,553	9,302,177	33,571,747	195,791,073	70,587,407	559,980,116
May 11.	253,682,899	14,95,590	33,595,869	300,343,823	67,996,639	534,319,790
May 18.	257,961,874	15,567,252	33,63,801	301,436,664	63,828,051	502,475,798
May 25.	256,091,805	14,088,667	33,697,259	193,673,245	60,552,440	431,733,030
June 1.	252,791,514	14,617,070	33,747,039	190,336,143	58,459,837	448,678,526
June 8.	250,477,993	15,699,038	33,719,088	184,730,335	55,823,17	461,794,216
June 15.	246,228,465	12,658,889	33,707,199	180,317,763	57,994,394	460,983,602
June 22.	243,640,477	9,899,585	33,633,171	179,477,110	55,118,159	443,440,591
June 29.	242,641,254	7,768,998	33,542,560	186,213,257	70,174,755	493,944,386
July 6.	246,861,387	10,853,171	33,669,397	191,534,313	71,101,479	494,051,980
July 13.	247,918,009	12,715,404	33,653,369	197,573,053	73,495,706	521,253,463
July 20.	249,530,253	11,197,700	33,574,943	199,432,053	72,441,301	491,890,353
July 27.	251,248,830	8,78,894	33,568,859	300,808,638	74,605,480	451,097,299
August 3.	264,940,016	6,461,491	33,59,117	301,153,754	75,096,703	468,031,746
August 10.	253,427,340	6,811,997	33,061,578	199,403,703	76,047,451	499,583,086
August 17.	253,232,411	6,920,537	33,069,737	194,046,591	69,478,793	414,359,517

Date.	Loans.	Specie.	Circulation.	Deposits.	Legal Tend's.	Ag. clear'gs
August 31.....	250,697,579	5,098,535	33,795,349	183,744,101	64,980,680	431,496,667
August 31.....	247,877,063	7,371,595	33,715,138	190,892,315	67,933,971	385,591,548
September 7.....	250,234,560	7,967,619	33,796,173	195,183,114	69,657,445	441,707,365
September 14.....	254,160,587	8,184,946	34,015,325	193,086,775	66,176,908	511,082,763
September 21.....	254,794,087	8,617,498	34,068,448	185,608,989	67,709,585	592,143,360
September 26.....	251,918,751	9,496,163	34,147,269	181,439,410	55,991,526	600,688,710
October 5.....	247,934,369	9,368,608	34,925,541	178,447,423	66,853,585	570,187,634
October 13.....	247,833,133	9,608,771	36,006,541	177,124,634	56,114,949	545,512,270
October 19.....	247,553,911	7,319,910	34,067,460	173,438,375	54,3,5,333	558,163,707
October 26.....	246,810,718	6,161,164	33,959,080	173,864,193	56,881,918	511,792,667
November 2.....	247,327,498	8,974,535	34,037,076	178,909,734	57,399,067	491,356,378
November 9.....	247,918,175	13,816,984	34,069,908	177,849,809	55,540,533	515,391,950
November 16.....	248,439,814	13,784,964	34,181,366	177,742,853	54,329,550	495,217,133
November 23.....	249,343,649	15,499,110	34,129,911	174,751,683	51,121,911	550,006,807
November 30.....	247,815,509	16,512,890	34,080,793	176,686,233	52,083,133	433,734,259

PHILADELPHIA BANK RETURNS.

Date.	Legal Tenders.	Loans.	Specie.	Circulation.	Deposits.
January 5.....	\$30,309,064	53,312,317	906,065	10,388,820	41,508,327
January 12.....	20,006,355	53,526,401	998,399	10,380,577	41,023,361
January 19.....	19,448,099	53,455,807	877,546	10,381,595	39,046,646
January 26.....	19,363,374	53,168,473	890,583	10,384,683	39,001,770
February 3.....	19,969,128	56,35,180	871,564	19,430,858	39,692,712
February 9.....	19,659,350	52,824,329	873,614	10,448,983	39,811,795
February 16.....	18,892,747	53,573,180	897,110	10,523,973	40,050,717
February 23.....	17,897,598	53,394,731	941,923	10,546,434	38,616,013
March 1.....	18,150,657	51,979,173	816,328	10,51,600	39,867,368
March 9.....	17,591,705	51,861,483	833,755	10,573,068	37,311,672
March 16.....	16,955,613	50,5,8,394	853,088	10,680,911	3,826,601
March 23.....	16,011,780	50,573,490	807,848	10,611,987	34,611,546
March 30.....	15,856,948	50,880,806	603,148	10,631,833	34,150,283
April 6.....	15,823,745	50,998,321	64,719	10,651,615	34,794,595
April 13.....	16,188,407	51,283,776	646,635	10,646,267	34,947,083
April 20.....	16,523,296	51,611,441	485,835	10,647,334	35,380,580
April 27.....	16,737,901	51,890,959	332,317	10,638,021	35,394,074
May 4.....	17,198,556	53,064,267	356,055	10,689,695	37,571,064
May 11.....	17,278,919	53,474,858	408,762	10,627,953	38,173,189
May 18.....	16,770,481	53,896,320	402,978	10,630,891	38,296,533
May 25.....	16,019,180	53,536,170	369,133	10,635,530	37,778,782
June 1.....	16,881,109	53,747,899	334,393	10,637,433	37,323,144
June 8.....	16,980,730	53,153,134	346,615	10,642,930	37,353,614
June 15.....	16,800,010	53,192,049	338,261	10,646,398	37,174,269
June 22.....	15,964,424	52,968,441	373,906	10,642,224	37,333,479
June 29.....	16,103,61	52,538,963	365,187	10,641,311	36,616,847
July 6.....	16,722,675	52,430,273	461,961	10,644,301	37,671,454
July 13.....	16,324,914	52,602,353	419,399	10,641,770	
July 20.....	16,608,989	53,150,569	371,714	10,637,651	38,176,418
July 27.....	16,862,113	53,104,475	333,118	10,638,736	37,229,640
August 3.....	16,733,198	53,427,840	304,055	10,635,935	38,094,543
August 10.....	15,909,195	53,117,553	304,979	10,627,761	36,981,477
August 17.....	15,767,146	53,549,449	317,389	10,628,310	36,364,336
August 24.....	16,882,816	53,399,090	314,242	10,623,324	36,469,531
August 31.....	15,717,009	53,784,687	307,658	10,626,355	36,529,355
September 7.....	16,349,658	53,776,452	279,714	10,638,794	36,428,559
September 14.....	16,080,733	53,792,303	252,691	10,632,737	36,289,347
September 21.....	15,843,483	53,540,501	228,528	10,638,744	35,227,303
September 28.....	15,512,794	53,655,569	272,535	10,639,976	35,132,606
October 5.....	15,527,404	53,041,100	258,303	10,627,921	36,434,213
October 12.....	15,097,413	52,97,1,67	266,714	10,638,395	34,334,542
October 19.....	14,917,093	53,090,283	237,135	10,635,015	34,326,694
October 26.....	14,947,184	53,57,553	15,746	10,634,907	33,638,465
November 2.....	15,0,9,864	52,54,0,777	113,590	10,640,890	33,604,01
November 9.....	14,709,023	52,336,923	220,334	10,646,512	33,948,975
November 16.....	14,654,003	51,914,018	223,043	10,640,933	33,929,730
November 22.....	15,299,173	51,159,489	222,334	10,663,398	
November 30.....	15,185,830	51,913,435	216,071	10,646,819	

BOSTON BANK RETURNS.

(Capital Jan. 1, 1866, \$41,900,000.)

	Loans.	Specie.	Legal Tenders.	Deposits.	Circulation.	
					National.	State.
January 7.....	\$97,009,743	1,183,451	17,053,257	40,324,618	24,880,367	813,664
January 14.....	94,41,778	1,334,300	16,839,15	40,346,316	24,997,446	811,749
January 21.....	95,296,932	1,078,160	16,89,99	38,679,604	24,275,163	301,911
January 28.....	97,891,329	1,068,339	16,816,481	39,219,341	24,718,697	302,398
February 4.....	97,742,461	936,569	16,264,604	39,708,953	24,691,075	306,014
February 11.....	97,264,182	878,306	1,102,479	39,474,359	24,689,663	303,603
February 18.....	96,949,413	929,940	15,898,323	38,900,50	24,768,420	305,601
February 25.....	96,33,900	772,403	15,741,046	37,893,963	24,953,003	303,223
March 4.....	96,050,737	958,887	15,98,103	38,316,573	24,676,767	301,410

						Circulation.	
		Loans.	Specie.	Leg. Tenders.	Deposits.	National.	State.
March	11.....	\$3,078,975	695,447	15,719,479	36,713,033	24,844,331	189,538
March	18.....	\$3,156,498	598,194	16,370,979	36,751,733	24,880,533	189,133
March	5.....	\$2,661,090	516,194	16,567,905	36,751,735	24,788,733	189,091
April	1.....	\$1,733,347	435,113	17,12,433	37,056,388	24,843,376	189,935
April	8.....	\$1,579,549	456,776	16,899,418	37,358,776	24,851,539	189,011
April	15.....	\$1,713,414	376,848	16,815,956	37,315,536	24,338,519	187,305
April	23.....	\$2,473,815	343,713	16,549,598	38,307,508	24,852,900	189,701
April	29.....	\$2,353,933	339,354	16,930,664	37,327,033	24,81,437	189,333
May	6.....	\$2,694,935	571,598	16,571,736	38,731,769	24,784,333	189,306
May	13.....	\$2,438,114	517,597	16,553,431	38,504,751	24,808,993	189,514
May	20.....	\$2,632,587	507,806	16,499,319	37,874,853	24,833,469	189,471
May	27.....	\$2,396,677	441,073	16,833,361	37,133,051	24,805,880	189,951
June	3.....	\$2,694,935	571,598	17,178,901	37,0,894	24,785,794	179,375
June	10.....	\$2,436,107	496,767	16,767,854	36,033,716	24,804,133	189,736
June	17.....	\$2,725,498	511,095	15,719,796	36,089,933	24,771,778	171,043
June	24.....	\$2,951,163	470,544	15,753,336	36,821,129	24,788,947	187,394
July	1.....	\$2,998,703	517,456	16,056,141	37,475,337	24,737,3-3	189,333
July	8.....	\$2,747,778	915,398	15,065,496	38,351,040	24,801,333	189,494
July	15.....	\$5,040,468	833,466	15,397,878	38,640,431	24,771,683	184,323
July	23.....	\$5,096,51	65,303	15,427,635	38,333,613	24,744,391	189,884
July	29.....	\$5,594,314	361,878	15,543,401	38,548,723	24,633,743	185,523
August	5.....	\$5,397,568	473,045	15,51,084	38,396,456	24,655,075	183,333
August	13.....	\$7,098,873	412,317	15,196,701	38,333,576	24,670,553	189,078
August	19.....	\$6,301,587	365,137	14,697,154	36,303,688	24,613,921	189,507
August	26.....	\$6,945,437	396,576	15,175,433	36,790,634	24,707,736	181,363
September	3.....	\$7,019,818	400,680	15,396,333	36,810,308	24,734,146	189,577
September	9.....	\$7,733,719	510,564	14,674,569	35,966,130	24,733,987	189,749
September	16.....	\$7,923,433	453,039	13,433,333	36,068,369	24,817,769	189,733
September	23.....	\$7,093,167	467,016	13,584,108	34,333,686	24,801,564	189,333
September	30.....	\$6,409,055	453,599	13,046,369	35,294,333	24,656,535	189,533
October	7.....	\$6,177,169	417,073	13,046,369	35,294,333	24,656,535	189,533
October	14.....	\$6,733,617	478,161	13,5,2,653	35,969,165	24,808,309	189,776
October	21.....	\$5,333,43	444,311	13,603,31	36,636,309	24,717,594	189,776
October	28.....	\$5,902,166	389,943	13,909,546	37,361,813	24,673,016	189,333
November	4.....	\$6,183,403	579,139	14,337,43	37,379,191	24,598,409	189,776
November	11.....	\$6,534,553	743,736	13,764,548	37,554,354	24,663,434	189,776
November	18.....	\$5,997,345	755,077	13,877,930	37,364,908	24,713,735	189,474
November	25.....	\$6,913,510	651,366	13,806,184	38,393,435	24,733,210	189,033

CONTENTS FOR DECEMBER.

No.	PAGE.	No.	PAGE
1. The Dominion of Canada and the Reciprocal Trade.....	400	9. Mr. McCulloch's Annual Report.....	403
2. Extinction of the Public Debt.....	413	10. Department Reports.....	446
3. Our Debts and Resources.....	416	11. The Public Debt.....	463
4. Manufactures, Tariffs and Taxation ..	419	12. Debt of Brooklyn City.....	470
5. On the Tariff and the Principle of Taxation.....	421	13. Our Late Mining Enterprises.....	471
6. Railroad Earnings for October.....	437	14. American Footholds in China.....	473
7. The Gold Movement since 1860.....	439	15. Taxable Property in San Francisco.....	475
8. Our Railroad System.....	439	16. Commercial Chronicle and Review.....	478
		17. Journal of Banking, Currency, and Finance.....	483

The following advertisements appear in our advertising pages this month:

MERCHANTS.
 Lillie's Fire & Burglar-Proof Safes—198 B'way
 Lewis Andendried & Co.—110 Broadway—Anthracite and Bituminous Coal.
 A. B. Sands & Co.—139-141 William St.—Drugs
 Daryea's Malzeas—166 Fulton street.
BANKERS & BROKERS.
 Duncan, Sherman & Co.—Cor. Pine & Nassau.
 L. P. Morton & Co.—30 Broad Street.
 South National Bank—536 Broadway.
 Ninth National Bank—386 Broadway.

Lockwood & Co.—94 Broadway.
 Barstow, Eddy & Co.—26 Broad St.
 Gilmore, Dunlap & Co.—Cincinnati.
 DeWitt, Kittle & Co.—88 Wall St.
 Vermilye & Co.—44 Wall St.
 Eugene Kelly & Co.—35 Wall St.
 Simon De Visser—53 Exchange Place.
INSURANCE.
 Fidelity Insurance Co.—17 Broadway.
 Marine—Great Western Insurance Co.
 Fire—Hope Fire Ins. Co.—98 Broadway.



Lightning Source UK Ltd.
Milton Keynes UK
UKHW020206260219

337978UK00012B/1277/P



9 781528 530293

Forgotten Books

*Forgotten Books' Classic Reprint Series
utilizes the latest technology to regenerate
facsimiles of historically important writings.*

*Careful attention has been made to accurately
preserve the original format of each page whilst
digitally enhancing the quality of the aged text.*

*Philosophy ~ Classics ~ Science ~ Religion
History ~ Folklore ~ Mythology*



Forgotten Books

